LIMA LOCOMOTIVE WORKS
INCORPORATED

LIMA, OHIO, U. S. A.

GEARED LOCOMOTIVE

Class 70-3 TRUCK SPECIAL Dept. DRAWING ROOM

CONSTRUCTION ORDER No.	SHOP NUMBERS	DATE
475	3315	10-27-27

FORM LED 60

ADDITIONS AND CHANGES

ADDITIONS

PICKERING LUMBER COMPANY
Tuolumne, California

May 15,16,17,18, 1929 5822
George Craick
John E.Dixon, V.P.
C.C. 11-13-28

May 18:

Shay 3315: Made trip to Camp 21 and locomotive sanded three times in 22½ miles. This locomotive is equipped with Mudge Security Unit Spark Arrester.

The netting applied with spark arrester is 1/6" wide by 1/2" long. It was daylight when we made this trip, so no sparks could be seen, Mr. O.H. Smythe, Engineer, advises no sparks can be seen at night. Examined netting this A.M. and found it clogged a little. Find exhaust keeps all sand out of smokebox. Petticoat pipe had to be removed to get this spark arrester applied and trap door was too small to apply it afterwards. No petticoat pipe and steaming fine. Is in fine mechanical and clean condition.

The state fire rangers are coming here to make inspection and test of the Mudge Security Unit Spark Arrester against one of their own design, which is applied to Shay 3199. A netting 5/32" x 5/32" is applied the same shape as petticoat pipe. A 1/4" plate is cut out to fit over nozzle. 18" in diameter and 22" wide where it bolts to top of smokebox. This is also giving good results.

Mr. Zigler says they will have to have another locomotive next year. They have applied a 8½" cross compound air pump to Shays 3176 and 3199.

All line shaft, horn and journals brasses made by Frank Holman, a local foundry.

475

CHANGES

	ITEMS
	1450-1452
	2425
	29
	4
	24-25
	9
	51-52
	8
	46-48 To 52-54
	5051
	31-32-33-34
	39-40-41-42-55 To 58
	6
	0
	-4
	30-31
	32
	28-29
	5-6
	7-7-1
	34
	28
	51
	53
	36
	39
	57
	5
	25
	54
	3-4
	6
	43-44-45
	5
	2
	13-To 16-21-29
" " "	6 6
" " "	3 29-26
1-9-28	4 38
" " "	9 1-2-4-5
1-16-28	11 20
" "	24 46
1-14-"	5 15-21
1-17-28	4 31 To 35
" " "	12 55 To 58
" " "	9 6-7-31-32
1-27-28	27 1
2-28-28	13 11

12	37	"				
7	56	S				
9	41-42	S				
15	45-46-47-48-49	SO				
7	15-16	"				
5	46	"				
3	42	"				
6	49	"				
15	9-10	S				
4	13	SO				
26	28	"				
27	2	"				

CLASSIFICATION OF DRAWINGS

GEARED LOCOMOTIVE

Group No.	TITLE
10	Ash Pan and Oil Pan
11	Axles
12	Bell and Ringer Blow-off Cock—See 26 Blower Pipe Elbow—See 63
13	Boilers
14	Boiler Details and Attachments—Tubes and Flues. Boiler Checks—See 55
15	Bolts and Nuts, Studs, Pins and Bushings Boxes, Shay Engines—See 93
18	Brackets, Air and Steam Gauge Brackets, Shay Cylinder, Steam and Cylinder Bottom Brackets
20	Brake Equipment, Foundation, All Brake Equipment, Engine and Tender Brick Arch—See 45
21	Bumpers and Details By-pass Valve—See 34
22	Cabs
23	Cab Details, Apron, Brackets, Door Fixtures, Ventilator, etc. Cab Handle—See 53 Cab Lamp—See 54 Cab Tool Box—See 23 Cab Turret—See 78 Chafing Plate—See 48 Cinder Valve and Pipe—See 75 Clearances—See 98 Coal Pusher—See 88
26	Cocks and Valves, Cylinder and Blow-off Cocks, Globe Valves
27	Cocks and Valves, Gauge, Water and Special
28	Cock Rigging Connecting Rods—See 72 Coupler, Engine—See 37 Coupler, Tender—See 37
29	Crank Pins and Details
30	Crossheads, Arm, Pin, Key and Shoes Crossties—See 48
31	Cylinders and Barrel Bushings
32	Cylinder and Steam Chest Heads and Covers, Steam Chests and Bushings
34	Cylinder By-pass, Relief, Vacuum and Drifting Valves
35	Die Work—Flanging Dies
36	Dome—Cap, Casing and Ring
37	Draw-Gear, Engine, Coupler, Uncoupling Rigging Front Buffers, Drawbars, Safety Chains and Bars All Drawgears F and B Drawgear, Tender—See 37 Draft Pipe—See 75 Dry Pipe—See 91
39	Eccentrics, Cranks, Straps and Rods Engine Truck—See 93
42	Erecting Cards—Elevations
43	Erecting Cards—Cross Sections
44	Exhaust Pipe and Nozzles Expansion Pad, Knee and Plate—See 48 Feed Water Attachments—See 55
45	Fire Door, Fire Brick and Tubes, Smoke Consumer Fire Box Ring—See 14 Fire Extinguisher—See 64
48	Frames and Details
49	Gauges, Templates and Jigs
50	Guides, Yoke and End
51	Grate Arrangement
52	Grate Details Hand Holes—See 66
53	Hand Rail and Steps, Engine and Tender
54	Headlights and Signal Attachments, Lamps, Electric Wiring, Builders License and Number Plates
55	Injectors, Boiler Checks and Strainers Keys—See 15

Group No.	TITLE
57	Lagging and Jacket Lamps—See 54
58	Link Motion Mud Drum—See 14 Number Plates—See 54
59	Oil and Grease Cups, Lubricator and Bracket, Oil Can Holder, Flange Lubricator
60	Oil Burning Attachments—Engine Oil Burning Attachments, Tender—See 82
61	Painting, Lettering and Numbering—Photo
62	Pilot and Snow Plows
63	Pipe Fittings and Clamps, Air, Steam, Water and Lubricator Pipe Fittings
64	Piping Arrangements, Engine and Tender, Air Brake, Cooling, Oil Heater, Sprinkler and Steam Heat Piping
65	Piston and Rod, Extensions, Rod Packing
66	Plugs, Hand Holes and Washout Push Pole Pocket—See 21
68	Reverse Lever, Screw and Pneumatic Gears
69	Reverse Shaft and Reach Rod
70	Rocker and Box
71	Running Boards & Brackets, Side and Deck Sheets
72	Rods—Connecting and Stubs Safety Valves—See 78
73	Sand Box, Sanders and Rigging Side Sheet, Cab—See 71 Signal Attachments—See 54
74	Shafts—Crank, Line, Square, Crank, Counterbalance, Couplings, Brasses, Pinions, Gears, etc.
75	Smoke Box Arrangement, Front and Door, Smoke Stack and Extensions, Smoke Box Braces Smoke Consumer—See 45 Speed Recorder—See 99
76	Springs Sprinkler—See 64 Steam Chests—See 32
78	Steam Gauge, Safety Valve and Turrets Steam Heat—See 64
79	Steam Pipes and Tee Heads Steps—See 53
80	Stoker and Details, Engine and Tender
81	Superheater, Header and Details Superheater Flues—See 14
82	Tank Valves—Oil and Water, Handle, Well, Goose Neck, Strainer, Hose
85	Tender Frames
87	Tender Deck, Tool Box
88	Tender Tank—Water and Oil, Filling Hole, Tank Funnel, Coal Gate, Coal Pusher Tender Truck—Shay Engines—See 93
91	Throttle and Dry Pipe—Lever, Supports, Sleeves Tires—See 95 Tool Boxes, Engine—See 23 Tool Boxes, Tender—See 87
92	Tools
93	Trucks and Details, Shay Engine, including Boxes and Bearings Tube Setting—See 14 Turret, Safety Valve—See 78 Turret, Air—See 20
94	Valves, Distribution—Stems, Rods, Valve Rod Crosshead and Packing Valve Rod Crosshead Guide—See 94 Waist Sheets—See 48
95	Wheels and Tires—Driving Engine, Truck, Trailing, Tender Wheels
96	Whistle and Rigging
97	Preliminary Designs and Propositions
98	Clearance and Wheel Base Diagrams
99	Miscellaneous

	23	" " " Jaw									
	24	" " Shaft Bearing									
	25	" " Cleaning Door Hinge									
	26	" " Bell Crank Bracket									
	27										
	28										
	29										
	30	GROUP 11—AXLES									
	31	AXLE	6	112 A 5019	NICKEL STEEL	112 A 5019	—	—	—	—	
	32	"									
	33	GROUP 12—BELL									
	34	BELL	1	122 A 5005			—		12-34		
	35	" Frame	1	122 A 5003			12-17				
	36	" " Base	1	12508 SET 2			12-14				
	37	" Yoke	1	122 A 5003			12-29				
	38	" " Nut	1	"			12-40				
	39	" " Pin	1	"	BAR STOCK						
	40	" Crank	1	"			12-30				
	41	" Tongue	1	122 A 5006			—	12-35			
	42	" " Fulcrum	1	122 A 5007		122 A 5007					
	43	" Ringer Bracket	—								
	44	" Rope ~~Details~~ SCREW EYE	3	TO SUIT ERECT SHOP — PURCHASED							
	45	" " Sheave									
	46	" " " Chair									
	47	" " " Frame									
	48	" " Thimble	1	122 A 4	BAR STOCK						
	49	" " " Washer	1	"							
	50	" Ringer									
	51										
	52	GROUP 13—BOILER									
	53	Boiler Plan	1	138 D 5010	A.S.M.E						
	54	" Sections	—								
	55	" Material Bill	1 SET.	13.M.O. 5021 A							
	56	" Bracing List	1 "	138 D 5010							
	57										
	58										
	59										
	60										
	61										

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 10—ASH PAN								
g	1	~~ASH~~ OIL PAN	1	103A 5024						
	2	" Pan Material Bill	1 SET	10 M.O. 5033A						
	3	" " Hopper								
	4	" " Slide								
	5	" " Door Frame								
	6	" " Slide Frame								
	7	" " Door Links								
	8	" " Damper Rigging								
	9	" " " Bell Crank								
	10	" " " " " Fulcrum	—							
g	11	" " " Hinge	2	4½" × 1¾" × 6"	HALF BUTT					
	12	" " " " Lug								
	13	" " " " Bar								
	14	" " " Lift—Front								
	15	" " " " —Rear								
g	16	" " " Lug	1	103 A 5024		119-F-138				
	17	" " " "								
	18	" " " Rod Jaw								
	19	" " " " "								
	20	" " Netting Frames								
	21	" " Slide Rigging								
	22	" " " Rod								
	23	" " " Jaw								
	24	" " Shaft Bearing								
	25	" " Cleaning Door Hinge								
	26	" " Bell Crank Bracket								
	27									
	28									
	29									
	30	GROUP 11—AXLES								
g	31	AXLE	6	112 A 5019	NICKEL STEEL	112 A 5019	—	—	—	—
	32	"								
	33	GROUP 12—BELL								
g	34	BELL	1	122 A 5005			—		12-34	
g	35	" Frame	1	122 A 5003			12-17			

	23	" " "	451	142 B 5028	ROME HOLLOW	142 B 5028					
	24	" Radial Stay	112	11721 LINE 2		11721 LINE 2					
	25	" " "	64	11745		11745					
	26	" TATE EXPANSION STAYS	16	1⅛" DIA.	PURCHASED						
	27	" Cross Stay	—								
	28	" Tee Bar	2	19" LONG							
	29	" " "	2	15" "							
	30	" " "	2	10¼ "	6"×1"×5¼"×1¼"						
	31	" " "	2	16½" "							
	32	" " "	—								
	33	" " "	—								
	34	" Mud Ring	1	143 B 5021		—	—	14-108 ✓	—	—	
	35	" Tube Sheet Ring	1	142 A 5004		142 A 5004					
	36	" " " Studs	6	"		—					
	37	" Smoke Box Ring	1	11677 SET 6		116-F-30					
	38	" " " "	—								
	39	" Tube (small)	97	2" O.D. .109" THICK							
	40	" Flue (large) 39 142 W20K	15	5⅜" O.D. - #9 GAGE - 11'-1½" LONG							
	41	" Combustion Tubes	—								
	42	" Tube Setting	1 SET	11632 STYLE 4							
	43	" Flue "	1 SET	310 D 320	SEE BOILER FOR LENGTH.						
	44	" Test Plate	1	420 D 449							
	45	" WATER LINE MARKER	1	142 B 5022	STICK - BRASS						
	46	GROUP 15—BOLTS AND NUTS									
	47										
	48	GROUP 18—BRACKETS									
	49	Air Gauge Bracket	1	182 A 5106	PLATE		—	—			
	50	Steam Gauge Bracket	1	182 A 5101							
✓	51	Bottom Bracket	1	184 [illegible] 5003	Shop Ship Instructions Not To Drill Holes for EXP. Plate 11-VI-27 Until Ordered To Do So By Dwg. Room.		18-16	—			
	52	" " Caps	4	8730 SET 3				18-28 ✓			
	53	" " Bearing—Top	4	182 A 5038				18-32 ✓			
	54	" " " —Bottom	4	182 A 5034			18-61				
	55	" " " Wedge	4	182 A 5015			18-62				
	56	" " Wedge Screw	4	182 A 5022			18-31				
	57	" " " " Nut	4	"	BAR STOCK	182 A 5022					
	58	" " " " Cap	4	182 B 5075							
	59	Steam Bracket	1	187 C 5004		182 B 5075					
	60	BOTTOM " ~~BRACE~~	1	182 A 5102			18-362-A				
	61	STEAM " Brace	1	182 A 5071		182 A 5102					
						182 A 5071					

	22	" "
	23	" "
	24	" "
	25	" "
	26	" Pump Bracke
	27	" " "
	28	" Cyl. Lever F
	29	" Equipment
	30	" Valve
	31	" " Base
	32	" " Cap
	33	" " Slide
	34	" " Stem
	35	" " Handl
	36	" " "
	37	" " Stuffin
	38	" " "
	39	" " "
	40	" " Bracke
	41	" " "
	42	" Distributing
	43	" Relief Valve
	44	" " "
	45	" " "
	46	" —Frame Body
	47	" Lever—Fram
	48	" " "
	49	" " "
	50	" " "
	51	" " "
	52	" " "
	53	" " Fulcrur
	54	" " "
	55	" " "
	56	" " Guides
	57	" " "
	58	" " "
	59	" " "
	60	" " "
	61	" " "

LED 60-2

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 14—BOILER DETAILS								
0	1	Boiler Brace Rod Ends	24	11762 SET 2		117-F-202	⌐	⌐	⌐	⌐
0	2	" " " "	6	11754 " 4		117-F-145				
0	3	" " " "	2	142 E 126		117-F-200				
	4	" " " "	—							
	5	" " " "	—							
0	6	" " " Lugs	2	11762 SET 9		11762 SET 9	—	—	—	—
	7	" " " "	⌐							
	8	" " " "								
	9	" " " "								
0	10	" " " Jaws	20	310 D 164		310 S 105	—	—	—	—
0	11	" " " "	2	142 D 129		310 S 270	—	—	—	—
0	12	" " " STAY SLEEVES	16	TATE STYLE H	PURCHASED					
0	13	" " " " " CAPS	16	" " D	PURCHASED					
	14	" " " "	⌐							
	15	" " " "								
	16	" Sling Stay								
	17	" " "								
0	18	" Throat Brace	11	138 D 5010		117-F-81	—	—	—	—
	19	" " "	⌐							
	20	" Crown Bars								
	21	" " Roof Irons								
0	22	" Stay Bolt	148	142 A 5028		142 A 5028	⌐	⌐	⌐	⌐
0	23	" " "	451	142 B 5028	POME HOLLOW	142 B 5028				
0	24	" Radial Stay	112	11721 LINE 2		11721 LINE 2				
0	25	" " "	64	11745		11745				
0	26	" TATE EXPANSION STAYS	16	1⅛" DIA.	PURCHASED		⌐	⌐	⌐	⌐
	27	" Cross Stay	—							
0	28	" Tee Bar	2	19" LONG			⌐	⌐	⌐	⌐
0	29	" " "	2	15" "						
0	30	" " "	2	10¼ "	6"×1"×5¼"×1¼"		⌐	⌐	⌐	⌐
0	31	" " "	2	16½ "						
	32	" " "	—							
	33	" " "	—							

LED 60-3

Check	Item	
		GROUP 20
0	1	BRAKE
	2	"
0	3	"
	4	"
0	5	"
	6	"
0	7	"
	8	"
0	9	"
0	10	"
	11	"
	12	"
0	13	"
0	14	"
	15	"
0	16	"
0	17	"
0	18	"
	19	"
	20	"
	21	"
0	22	"
	23	"
	24	"
0	25	"
0	26	"
	27	"
0	28	"
0	29	"
0	30	"
0	31	"
0	32	"
0	33	"

	24	" " "	—								
	25	" " " Strap	2	202 F 5026		134-F-782					
	26	" Pump Bracket	~~2~~ 1	~~202 A 5066~~		—	20-~~XXXX~~	20-631	—	—	
	27	" " "	—	~~XXXX~~ LINE 2							
	28	" Cyl. Lever Fulcrum	1	13449		—					
	29	" Equipment	1 SET	70M5002 5010-B		—	20-197	—	—	—	
	30	" Valve	1	203 A 5010			—				
	31	" " Base	1	202 A 5138			20-38				
	32	" " Cap	1	202 A 5137			20-39				
	33	" " Slide Valve	1	202 A 5133			20-40				
	34	" " Stem	1	202 A 5136	BAR STOCK						
	35	" " Handle	1	202 A 5139							
	36	" " " Latch	1	202 A 5134	BAR STOCK				20-44	~~XXXXX~~	
	37	" " Stuffing Box	1	202 A 5132	STICK BRASS						
	38	" " " " Nut	1	"	" "						
	39	" " " " Follower	1	"	" "						
	40	" " Bracket	1	TO SUIT ERECT SHOP		TO SUIT ERECT SHOP					
	41	" " " Brace	1	" " " "		" " " "					
	42	" Distributing Valve Bracket	~~2~~ 1	B-13419 LINE 3		B-13419 LINE 3					
	43	" Relief Valve	~~3~~ 4	202 A 5140					20-71		
	44	" " " —Top	~~3~~ 4	"	STICK BRASS				—		
	45	" " " —Base	~~3~~ 4	"					20-73		
	46	" —Frame Body	—								
	47	" Lever—Frame	1	488 A 5053		20D 5112 - for future DRT-2-27-28					
	48	" " "	1	"		20M5104	for future locks to take clearance between brake rigging & boiler jacket (to close)				
	49	" " "	1	"		20Y5075					
	50	" " "	1	"		20A5112					
	51	" " "	1	"		20B5112					
	52	" " "	1	"		20N5104					
	53	" " Fulcrum—Frame	2	"		20C5112					
	54	" " " "	~~2~~	~~XXXXX~~		20B5096					
	55	" " " "	—1			20W5103	~~XXXXX~~	—			
	56	" " Guides "	2	488 A 5053		20X5103	for future - DRT-2-27-28				
	57	" " " "	1	"		20B5067					
	58	" " " "	1	"		20U5092					
	59	" " " "	1	"		20U5103					
	60	" " " "	—1	"		20D5070					
	61	" " " "	—1	"		134F286					
						134F287					

PATTERN NUMBERS Brass	PATTERN NUMBERS Mal. Iron	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	CASTINGS—PATTERN NUMBERS Cast Steel	CASTINGS—PATTERN NUMBERS Brass	CASTINGS—PATTERN NUMBERS Mal. Iron
				GROUP 20—BRAKE EQUIPMENT								
Z	Z	0 ✓	1	BRAKE CYLINDER	1	13533 LINE 7			20-166	—	—	—
			2	" "	—							
		0	3	" " Head	2	202A 5094			20-60	—	—	—
			4	" " "	—							
		0	5	" " Stuff. Box Gland	2	202A 5088			20-65	—	—	—
—	—		6	" " " " "	—							
		0	7	" Piston	2	202A 5113			20-47	—	—	—
			8	" "	—							
		0	9	" " Rings, Mat'l For	4	653D 5002	Pot Pattern		65-25	Z	Z	Z
—	—	0	10	" " " " "	2	652D 5156	" "		65-107			
—	—		11	" " " " "	—		" "					
			12	" " " " "	—		" "					
		0	13	" " Rod—Front	1	207S 5079	43½"	207S 5079	—	—	—	—
		0	14	" " " —Rear	1	202K 5029	45½"	202K 5029	—	—	—	—
			15	" " "	—							
		0	16	" " " Jaw	2	202A 5169		202A 5169	—	—	—	—
		0	17	" Hollow Piston Rod	1	24" × 2 5/16" Dia	Turn From					
		0	18	" " " "	1	30" × 2 5/16" "	2" Pipe					
			19	" Strut	Z							
			20	" "								
			21	" Reservoir Blocks								
Z	Z	0	22	" " Support	2	202F 5026				20-109B		
—	—		23	" " "	—							
			24	" " "	—							
		0	25	" " " Strap	2	202F 5026		134-F-782				
		0 ✓	26	" Pump Bracket	2/1	202A 5066		—	20-166A	20-631	—	—
			27	" " "	—							
		0	28	" Cyl. Lever Fulcrum	1	13449		—	20-197	—	—	—
Z	Z	0 ✓	29	" Equipment	1 SET	70M 5019-B		—	—	—	—	—
		0	30	" Valve	1	203A 5010			—			
		0	31	" " Base	1	202A 5138			20-38			
		0	32	" " Cap	1	202A 5137			20-39			
		0	33	" " Slide Valve	1	202A 5133			20-40			
108	—	0	34	" " Stem	1	202A 5136	Bar Stock		—		20-44	

	24	" Rod "	4	"							
	25	" " "	2	"							
	26	" " "	2	202 B 5035							
	27	" " "	1	202 C 5035							
	28	Truck Bolster Lever Fulcrum "	1	202 B 5036							
	29	" " Stop Lug "	2	202 C 5036							
	30	GROUP 21—BUMPERS									
	31	End Timber Arrangement—Front	1	213 A 5059							
	32	" " " —Rear	1	213 A 5060							
	33	" " Channels—Front	1	213 A 5059	15"-33# CHANNEL 102" LONG.						
	34	" " " —Rear	1	213 A 5060							
	35	" " Drawhead Blocks	2	"	4"x10½"x20" WOOD BLOCK						
	36	Push Pole Pocket	4	212 A 5002							
	37	TRUCK BRAKE PINS	24	202 S 5016							
	38	" " LEVER LINK	6	937 A 5008							
	39	GROUP 22—CAB									
	40	Cab	1	223 C 5007	PLATE						
	41	" Material Bill	1 SET	22 M.O. 5003-B							
	42										
	43										
	44	GROUP 23—CAB DETAILS									
	45	Cab Arm Rest	2	232 D 5032							
	46	" Joint Plate									
	47	" Strap									
	48	" Saddle Angle	1								
	49	" " Plate									
	50	" Sash Fixture									
	51	" Storm Window									
	52	" " "									
	53	" " " Adjusting Bar	1	232 A 5012							
	54	" " " " Plate	1	232 A 5010							
	55	" Awning									
	56	" Curtain									
	57	" " Rod									
	58	" Door Fixture									
	59	" " " Clamp	2	232 A 5019							
	60	" " " " Screw	2	232 A 5018							
	61	" " " " Slide Bar	2	232 A 5023	1" x ¾" x 28"						

202 B 5035
202 C 5035
202 B 5036
202 C 5036
202 S 5016 TO SUIT TRUCK SHOP
⅝" PLATE
21-7
23 A 5011
232 A 5010
23-3
23-2

LED 60-4

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 20—BRAKE (Cont.)								
	1	Brake Cylinder Bracket—Frame	1	488A5053	12"-30#C-60 9/16" LONG.	—				
	2	" " " "	1	202A5034	PLATE	—				
	3	" Rods "	1	488A5053		20W5054				
	4	" " "	1	"		20U5054 20H5110 20F5110				
	5	" " "	2	"	5/8"×2 1/2"×13 1/2" IRON BLOCKS					
	6	" " "	1	"	LENGTH TO SUIT ELECT. SHOP	13A F163 20R5061				
	7	" " PINS TRUCK "	6	202N5016		202N5016				
	8	" " " "	6	202U5016		202U5016				
	9	" " " "	6	202V5016		202V5016				
	10	" Beam— Truck	6	202F5208	—	—	—	—	—	—
	11	" " Fulcrum "	6	202A5163	—	—	—	—	—	—
	12	" " Safety Chain "	12	937A5008		20F5059		20-87		
	13	" HANGER LUG LOOP "	12	202A5105	PLATE 1/2"×4"×7 1/2"					
	14	" Hanger "	24	937A5008		20D5027				
	15	" " Lug "	12	202A5105				20-76		
	16	" Heads "	12	203B5008				20-79		
	17	" Shoes "	12	202D5104	(S) PAT. 20-654 PURCHASED.					
	18	" Lever "	1	937A5008		98-F-161				
	19	" " "	1	"		98-F-162				
	20	" " "	1	"		98-F-163				
	21	" " "	1	"		20A5056				
	22	" " "	1	"		20D5056				
	23	" " "	1	"		20E5056				
	24	" Rod "	4	"		20-D-[illegible] 202D5058				
	25	" " "	2	"		20-E-[illegible] 202E5058				
	26	" " "	2	202B5035		202B5035				
	27	" " "	1	202C5035		202C5035				
	28	Truck Roller Lever Fulcrum "	1	202B5036		202B5036				
	29	" " Stop Lug "	2	202C5036		202C5036				
	30	**GROUP 21—BUMPERS**								
	31	End Timber Arrangement—Front	1	213A5059						
	32	" " " —Rear	1	213A5060						
	33	" " Channels—Front	1	213A5057	15"-33# CHANNEL 102" LONG.					
	34	" " " —Rear	1	213A5058						

20 F 5059 — for future make threaded part of pivot bolt. Other end square for front truck

LED 60-5

Check	Item	
		GROUP 23—
	1	Cab Door
	2	" Venti
	3	" "
	4	" "
	5	" "
	6	" "
	7	" "
	8	" Seat—
	9	" " —
	10	" " I
	11	" " (
	12	" " I
	13	" " I
	14	" " I
	15	" Tool
	16	" DOOR
	17	
	18	
	19	
	20	GROUP 26
	21	Air Sand
	22	
	23	Angle Va
	24	"
	25	"
	26	"
	27	"
	28	
	29	Ash Pan
	30	
	31	Bell Ring
	32	
	33	Blower V

	25	" " Stem								
	26	" " Gland								
	27	" " Nut								
	28									
	29	Ash Pan Cock	—							
	30									
	31	Bell Ringer Valve	—							
	32									
O	33	Blower Valve	1	1" CRANE #1813	—	—	—	—	—	
O	34	" " Cap	1	3/4 GLOBE CRANE #4	—	—	—	—	—	
	35	" " Stem								
	36	" " Gland								
	37	" " Nut								
O	38	Blow Off Cock	1	1½" CROSBY LEVER TYPE - PURCHASED	—	—	—	—	—	
	39	" " " Cap								
	40	" " " Plug								
	41	" " " Nut								
	42	" " " Washer								
	43	" " Extension								
	44	Blow-off Valve								
O✓	45	Injector Starting Valve	✱1	2" CRANE #1811 & 2¼" C.P. UNION	—	—	—	—	—	
O	46	" " " ~~Cap~~	1	2" " #1811 & 2¼" C.P. UNION	—	—	—	—	—	
	47	" " " Stem								
	48	" " " Gland								
	49	" " " Nut								
O	50	Brake Stop Valve—Steam	1	3/4" CRANE #1811	Z	Z	Z	Z	Z	
O	51	" " " —Air	1	1¼" CRANE #1811						
O	52	" " " —Inter.	~~2~~	~~1" CRANE #~~						
	53									
	54	Cinder Swipe Valve	—							
	55									
O	56	Cylinder Cock	6	½" CUT-OUT COCK WITHOUT HANDLE WESTINGHOUSE #5213			—	—	—	
	57	" " Nut								
	58	" " Shank								
	59	" " Valve								
	60	" " Cap								
	61									

23-3
23-2

LED 60-5

Check	Item	
		GROUP 23—CAB
0	1	Cab Door Fixtu
0	2	" Ventilator
0	3	" "
0	4	" "
0	5	" "
	6	" "
	7	" " R
0	8	" Seat—Right
0	9	" " —Left
0	10	" " Back Su
	11	" " Cushion
	12	" " Post
	13	" " Hinge
	14	" " Rod
0	15	" Tool Box
0	16	" DOOR LOCKS
	17	
	18	
	19	
	20	GROUP 26—COCK A
0	21	Air Sander Valve
	22	
	23	Angle Valve
	24	" " Cap
	25	" " Stem
	26	" " Gland
	27	" " Nut
	28	
	29	Ash Pan Cock
	30	
	31	Bell Ringer Valve
	32	
0	33	Blower Valve
0	34	" " Cap
	35	" " Stem

O'Connor
SE-1

October 21, 1946

File: 1201.81

Mr. J. Griffin, C. E.
The Superheater Company
East Chicago, Indiana

Dear Sir: Superheater (Shay Locos.)

Referring to your letter of October 15th File C-138722-423, requesting information on superheater applied to Shay locomotives Shop Nos. 3176, 3199, and 3315.

The following covers the information you require.

Shop No.	3176	3199	3315
Lima Order	C.O. 348	C.O. 369	C.O. 475
Class	70-3 Shay	70-3 Shay	70-3 Shay
Superheater Spec.	017560	019984	LO-41619
Unit(Lima Dwg.)	813-D-20	813-D-20	813-J-20

I am sending print of Lima Dwg. 813-D-20 and 813-J-20 covering the units.

Yours very truly,

M. J. Donovan
Mechanical Engineer

FWG:DC
cc - Superheater Co. N.Y.
Mr. H. Scheib
Mr. F. W. George

Page 5

TERN NUMBERS

Brass	M[illegible]
7	7
—	—
	Z
—	

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	M[illegible]
		GROUP 23—CAB DETAILS (Cont.)								
	1	Cab Door Fixture Rod	2	232 A 5020		232 A 5020				
	2	" Ventilator	1	232 A 5028	PLATE 3/8 STUD	—				
	3	" " ~~Fixture~~ ADJ. STUD	1	"		—				
	4	" " Handle	1	11145		111-F-30				
	5	" " " Hinge	1	"		111-F-31				
	6	" " " Latch	—							
	7	" " Rod	—							
	8	" Seat—Right	1	232 A 5034	WOOD. APPLY WOOD BLOCKS TO BOTTOM TO SUIT NOTE IN SPECIFICATION.	—	—	—		
	9	" " —Left	1	"		—	—	—		
	10	" " Back Support	2	"	BAR IRON	1/4" x 3" x 26"	—	—		
	11	" " Cushion								
	12	" " Post								
	13	" " Hinge								
	14	" " Rod								
	15	" Tool Box	1	ALWAYS	ALWAYS					
	16	" DOOR LOCKS	2	YALE NIGHT RIM LATCH - PURCHASED						
	17									
	18									
	19									
	20	GROUP 26—COCK AND VALVES								
	21	Air Sander Valve	1	1/4" GLOBE CRANE #4						
	22									
	23	Angle Valve								
	24	" " Cap								
	25	" " Stem								
	26	" " Gland								
	27	" " Nut								
	28									
	29	Ash Pan Cock	—							
	30									
	31	Bell Ringer Valve	—							
	32									
	33	Blower Valve	1	1" CRANE #1813		—	—	—	—	—
	34	" " Cap	1	3/4" GLOBE CRANE #4		—	—	—	—	—
	35	" " Stem	—							

LED 60-6

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 26—COCKS & VALVES (Cont.)								
	1	Drip Valve Brake Exhaust Drain	—							
O	2	" " Check Pipe "	2	1/2" Crane Globe #4						
O	3	" " Exhaust " "	1	1/2" Cut-Out Cock #4 For Future						
O	4	" " Steam Chest "	1	1/2" " " #4						
O ✓	5	" " Water Gauge "	2	1/4" " " #4						
	6									
O	7	Drip Cock—Brake Exhaust Drain	1	1/4" Air Cock						
O	8	" " — " " " —Air	2	1/4" " "						
	9	" " —Check Pipe Drain	—							
O	10	" " —Fuel Sprinkler Drain	1	1/4" Air Cock						
	11	" " —Siphon Drain	—							
O	12	" " —Oil Heater Drain	3	3/8" Air Cock						
O	13	Generator Valve	1	3/4" Crane #1811						
	14	" " Cap								
	15	" " Stem								
	16	" " Gland								
	17	" " Nut								
O	18	Smoke Box Drain	1	1/2" Cut-Out Cock.						
	19	Feed Cock	-							
	20	Heater Valve								
O	21	House Blower Valve	1	3/4" Globe Crane #4						
	22	Lubricator Valve	—							
	23	" " Extension	—							
O	24	Oil Burner Valves	2	1/2" Globe						
O	25	" Heater "	1	1/2" "						
O	26	" Tank Blow-Back Valve	1	1/2" "						
O	27	" " Heater Valve	1	1/2" "						
O	28	Oil Cock	1	262 A 5003						
O	29	" " Cap	1	"						
O	30	" " Plug	1	"						
O	31	" " Spring	1	2" "						
O	32	" Tank ~~Washer~~ Water Drain Valve	—1	1/4" Globe						

Crane #4

#11 Wire

Crane #4

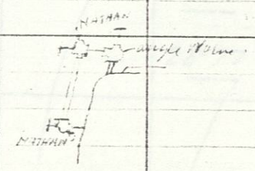
26-34
26-33
26-32

LED 60-7

Check	Item	
		GROUP 27- (GAUG
O	1	Gauge Co
	2	" "
	3	" "
	4	" "
	5	" "
	6	" "
	7	
	8	
	9	Gauge Co
O	10	" "
	11	
	12	
O ✓	13	WATER
O ✓	14	"
O ✓	15	"
O ~	16	"
O	17	"
O	18	"
O	19	"
	20	"
1 ✓	21	"
	22	"
	23	"
	24	"
	25	"
	26	"
	27	"
	28	"
O	29	"
	30	"
	31	"
	32	"

	25	" Heater "	1	½ "	CRANE #4							24	" "
	26	" Tank Blow-Back Valve	1	1" "								25	" "
	27	" " Heater Valve	1	½" "									
	28	Oil Cock	1	262 A 5003								26	" "
	29	" " Cap	1	"								27	" "
	30	" " Plug	1	"							26-34	28	" "
	31	" " Spring	1	"							26-33	29	" "
	32	" TANK ~~WASHER~~ WATER DRAIN VALVE	1	2" "	#11 WIRE						26-32	30	" "
	33	OIL PIPE VALVE	1	2" ¼ GLOBE	CRANE #4							31	" "
	34	Plug Cock—Injector Check		2" ¼ "								32	" "
	35	" " Cap										33	Water Gauge Ex
	36	" " Plug										34	Water Gauge Cock
	37	" " Nut										35	
	38	" " Washer										36	GROUP 28—COCK
	39	BLOW DOWN VALVE (LOCATED IN SAFETY VALVE TURRET)	1	1½" GLOBE	CRANE #4							37	
	40	Port Cock	—									38	Blow-off Cock
	41	OIL HEATER CHECK	1	½" SWING CHECK		—	—	—	—	—		39	" " "
	42	Siphon Valve	—									40	" " "
	43	DRIFTING VALVE	1	1" QUICK OPENING OKADEE BLOWER VALVE Okadee Print 1263								41	" " "
	44	Sprinkler Valve	1	½ GLOBE	CRANE #~~XXX~~							42	" " "
	45	" " Cap										43	" " "
	46	" " Stem										44	" " "
	47	" " Gland										45	CYL. COCK SHAFT
	48	" " Nut										46	Cylinder Cock
	49	OIL HEATER PIPE VALVE	1	2" GLOBE	CRANE #4							47	" "
	50											48	" "
	51	Steam Gauge Cock	1	¼" CYL. COCK LEVER HANDLE w ⅜" C.P. UNION								49	" "
	52											50	" "
	53	Steam Gauge Cock Extension	1	1146 4 STYLE 1 STICK BRASS								51	" "
	54											52	" "
	55	Tire Sprinkler Valve	—									53	" "
	56											54	" "
	57	Through Valve										55	GROUP 30—CROSS
	58	" " Cap										56	Crosshead
	59	" " Stem										57	" Shoe
	60	" " Gland										58	" "
	61	" " Nut										59	" Pin
												60	" Key
												61	

Mal. Iron	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
			GROUP 27—COCKS AND VALVES (GAUGE, WATER AND SPECIAL)								
	0	1	Gauge Cock	3	¾" NATHAN TYPE 272A 1001 EXCEPT ¾" P. THD.						
		2	" " Valve								
		3	" " Cap								
		4	" " Stem								
		5	" " Gland								
		6	" " Nut								
		7									
		8									
		9	Gauge Cock Extension	—							
	0	10	" " Dripper	1	272A 5006		—	27-38	—	—	—
		11									
		12									
	0 ✓	13	WATER GAUGE	# 2	#9 REFLEX	GAUGE STEMS TO BE 9" LONG TOP & BOTTOM					
	0 ✓	14	" " Upper Fitting	# 2	¾" ANGLE VALVE						
	P ✓	15	" " " " Cap	#2	¾" NATHAN						
	P ✓	16	" " " " ~~Nipple Valve~~	#2	¾ x 5½"	BRASS NIPPLE DRILL TO SUIT ERECT. SHOP THD. ¾ P. SIZE LENGTH TO SUIT ERECT. SHOP					
	0	17	" " " " Stem								
	0	18	" " " " Gland								
	0	19	" " " " Nut								
		20	" " " " Washer								
	1 ✓	21	" " Lower Fitting	# 2	¾" NATHAN						
		22	" " " " Cap								
		23	" " " " Valve								
		24	" " " " Stem								
		25	" " " " Gland								
		26	" " " " Nut								
		27	" " " " Washer								
		28	" " Cock Elbow	—							
	0	29	" " Lamp Bracket	# 2	TO SUIT ERECT SHOP		TO SUIT ERECT SHOP				
		30	" " Marker "								
		31	" " " " Clamp								
		32	" " "								
		33	Water Gauge Extension								
			Water Gauge Cock	—							



26-34
26-33
26-32

	25	" " " " Gland									
	26	" " " " Nut									
	27	" " " " Washer	—								
	28	" " Cock Elbow	—								
	29	" " Lamp Bracket	#2	To Suit Erect Shop		To Suit Erect Shop					
	30	" " Marker "									
	31	" " " " Clamp									
	32	" " "									
	33	Water Gauge Extension									
	34	Water Gauge Cock	—								
	35										
	36	**GROUP 28—COCK RIGGING**									
	37										
	38	Blow-off Cock Rigging	1 SET	A-11426							
	39	" " " Handle	1	732A5027							
	40	" " " Rod	1	3/8" Pipe To Suit Erect Shop			73-6	—	—	—	
	41	" " " "	—								
	42	" " " " Jaw	1	A-11426		28A5003					
	43	" " " ~~Lever~~ " Pin	1	To Suit Erect Shop	3/8" Rivs - 1 3/4" Long						
	44	" " " " Fulcrum	—								
	45	Cyl. Cock Shaft Handle Fulcrum	1	282C5013	1/4" Plate						
	46	Cylinder Cock Rigging	1 SET	282C5015							
	47	" " Eye Bolt	3	282D5005							
	48	" " ~~Hand~~ Lever	6	282A5014							
	49	" " Hand " ~~Fulcrum~~	1	282A5017		282A5017				28-77	
	50	" " Rod	1	~~282B5004~~	3/4" Dia. 92" Long	W&A 3005 for this purpose					28-1
	51	" " " Lever	3	282A5004	rest made for rear cylinder						28-1
	52	" " " ~~Jaws~~ Brackets	1	282H5013	1/4" Plate						
	53	" " Valve ~~Lever~~ Connection	3	282A5519	3/16 x 3/4" Bar.						
	54	" " " " Connection	1	282A5016		282A5016					
	55	**GROUP 30—CROSSHEAD**									
	56	Crosshead	3	302C5017							
	57	" Shoe	6	7820	BABBITTED		—	30-15			
	58	" " Bolts	6	302C5017			30-68				
	59	" Pin	3	7812 SET 6		FIN. SIZES 8 3/4" x 3" DIA.	—				
	60	" Key	—								
	61										

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 31—CYLINDER								
0	1	CYLINDER	2	313 D 5000			31-11			
0	2	"	1	"			31-12			
0 ✓	3	" Frame	2	313 D 5001				31-54		
0 ✓	4	" "	1	"				31-54		
	5	GROUP 32—CYLINDER DETAILS								
0	6	Cylinder Head	3	322 A 5032						
0	7	" " Casing	3	322 A 5036	PRESSED STEEL		32-36 —			
	8									
	9									
0	10	Steam Chest Cover	3	322 A 5017						
0	11	" " Casing	3	7416 SET 8			32-57 —			
	12	Valve Chamber Head								
	13	" " "								
	14	" " Cover								
	15	" " Bushing								
	16									
	17									
	18	GROUP 34—CYL BY-PASS & RELIEF VAL								
0 ✓	19	Steam Chest Relief Valve	3	3" 4 CROSBY SPRING-SEAT ~~SWING~~ CHECK VALVE FIG # 208 - PURCHASED.						
	20	" " " " Base								
	21	" " " " Cap								
	22									
	23									
	24									
	25									
	26	GROUP 35—DIE WORK	—							
	27									
	28									
	29									
	30									
	31									
	32									
	33	GROUP 36—DOME								
0	34	Dome	1	138 D 5010						
0	35	" Flange	1							

Check	Item
0 ✓	1
0 ✓	2
	3
0 ✓	4
0 ✓	5
0 ✓	6
0 ✓	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	19
	20
	21
	22 "
	23 "
	24 "
	25 "
	26 "
	27 "
	28 "
	29 "
	30 "
0 ✓	31 "
0 ✓	32 "
0	33 Shackl
0	34 "
0	35 "

	25					
	26	GROUP 35—DIE WORK				
	27		—			
	28					
	29					
	30					
	31					
	32					
	33	GROUP 36—DOME				
1	34	Dome	1	138 D 5010		
1	35	" Flange	1	362 C 5001		
1	36	" " Radius	—	29½"		
0	37	" Cap	1	362 C 5011		
0	38	" Ring	1	362 A 5010		
0	39	" Casing—Base	1	363 D 5013	PRESSED STEEL	
	40	" " —Shell				
	41	" " —Top				
	42	" Flow Bowl				
	43	" " " Bracket				
	44					
	45					
	46					
	47	GROUP 37—DRAWGEAR F & B				
	48	Coupler F.				
	49	" B.				
	50	" Knuckles				
	51	" "				
	52	" Lock				
	53	" " Lifter				
	54	" Link				
	55	" Lever				
	56	Uncoupling Shaft				
	57	" "				
	58	" " Bracket				
	59	" " "				
	60	Buffer				
	61					

	23	" " " Binder Plate									
	24	" " Carrier Link									
	25	" " " Pin									
	26	" " " Plate									
	27	" Bar Guide									
	28	" " Pin									
	29	" " Carry Iron									
	30	" " " " Bolt Liner									
✓	31	" Pin—Front	1		ALTER OLD PINS TO THIS CARD.	372 C 5071					
✓	32	" "—Back	4		" " " " "	372 C 5071					
	33	Shackle Bar	1	10848 LINE 1		108-F-15					
	34	" " Key	1	"		108-F-20					
	35	" " Gibs	2	"		1" x 3" x 6"					
	36	" " Brace	1	10850 LINE 1		108-F-12					
	37	" " " Pad	1	"				37-77 ✓			
	38	" " " Pin	1	10851 LINE 3		108-F-25					
✓	39	" " Pin	1	" " ~~17~~ 17		10851 LINE ~~17~~ 17					
	40	Safety Link	2	10849 " 1		108-F-14					
	41	" " Pins	2	10851 " 18 ✓		1085F LINE 18					
	42	" " "	2	" " 11 ✓		" " 11					
	43	GROUP 39—ECCENTRICS									
	44	ECCENTRIC—No. 1 Cylinder	1	392 A 5019			39-66				
	45	" No. 3 Cylinder	1	"			39-66				
	46	" No. 2 Cylinder—Top	1	392 A 5068			39-391				
	47	" No. 2 Cylinder—Bot.	1	"			39-392				
	48	" Key	2	"	CHROME VANADIUM.						
	49	" Stud	2	"	MACH STEEL						
	50	ECCENTRIC STRAP Top	6	392 A 5098	BABBITTED	—	39-34				
	51	" " Bottom	6	"	"	—	39-35				
	52	" " Bolts	12	"		—					
	53	" " Liner	—								
	54	" " Filler	—								
	55										
	56	ECCENTRIC ROD	3	392 A 5084		84-F-40					
	57	" "	3	392 B 5084		84-F-45					
	58	" " Pin	3	393 F 5000							
	59	" " "	3	393 E 5000							
	60	" " Bolts	6	8509 SET 12							
	61	" " "	6	" " "							

PATTERN NUMBERS

Brass	Mal. Iron
	7
	7
	7

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 37—DRAWGEAR (Cont.)								
0 ✓	1	Drawhead	2	372 WA 5086 372 A 5087			—	37-4½	—	—
0 ✓	2	Draw Gear Brace	4	A-11058 LINE 9	Use ½ in each	A-11058 LINE 9	—	—	—	—
	3	" " "								
0 ✓	4	" " " Foot	1	A-11058 LINE 9		—	—	37-73	—	—
0 ✓	5	" " " Foot	1	" "		—	—	37-115	—	—
0 ✓	6	" Head Brace - Rear (Right)	1	372 A 5087	Alter Old Forging	372 A 5087	—	—	—	—
0 ✓	7	" " Shims " (Left)	1	372 B 5087	" " "	372 B 5087	—	—	—	—
	8	" " Pin								
	9	" " Frame—Front								
	10	" " " "								
	11	" " " —Rear								
	12	" " " "								
	13	" " Tie Plate								
	14	" " Friction Plate								
	15	" " Sliding Bar								
	16	" " " "								
	17	" " Connecting Rod								
	18	" " " " Pin								
	19	" " Yoke								
	20	" " " Block								
	21	" " " Followers								
	22	" " " "								
	23	" " " Binder Plate								
	24	" " Carrier Link								
	25	" " " Pin								
	26	" " " Plate								
	27	" Bar Guide								
	28	" " Pin								
	29	" " Carry Iron								
	30	" " " " Bolt Liner								
0 ✓	31	" Pin—Front	4		Alter Old Pins to this Card.	372 C 5071				
0 ✓	32	" " —Back			" " " " "	372 C 5071				
0	33	Shackle Bar	1	10848 LINE 1		108-F-15				
0	34	" " Key	1	"		108-F-20				
0	35	" " Gibs	2	"		1" x 3" x L"				

LED 60-10

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 42—ERECTING CARDS								
0	1	ERECTING PLAN—Elevation	1	428D5014						
	2	GROUP 43—ERECTING CARDS								
0	3	ERECTING PLAN—Sections	1	433B5050						
	4									
	5	GROUP 44—EXHAUST PIPE & NOZZLES								
0	6	EXHAUST Drop Pipe	1	442A5031						
0	7	" " Pipe Flange	1	442A5033			44-553			
0	8	" Nozzle	1	442A5062			44 559			
0	9	" "	1	442B5062			44-68			
0	10	" "	1	442D5062			44-113			
	11	" " Tip	—				44-68			
0	12	" Extension	1	442C5051						
0	13	" Gland	1	442A5018			44-561			
0	14	" Reducer	1	442C5001			44-533			
0	15	" PIPE ~~Gland~~ PACKING	X SET	SPECIAL "H.P." SQUARE WICK PACKING. REQUIRED FOR JOINTS MACHINED			44-558			
0	16	" Pipe Elbow	1	442A5016						
0	17	" " Joint Ring	1	792K5029			44-532			
0	18	" "	1	442C5015	6" W.I. PIPE		79-22			
0	19	" " ~~Nipple~~ CLAMP	2	442A5034		442A5034	—	—	—	—
	20	GROUP 45—FIREDOOR AND FIREBRICK								
0	21	FIRE BRICK	475	9" x 4½" x 2½" ARCH LOCK TYPE #224 & 6-SACKS OF FIRE CLAY, TO BE INSTALLED WHEN ENG. REACHES						
	22	" " Arch Tube	—	ITS DESTINATION.						
	23	" " " " Setting	—							
	24									
0	25	FIRE DOOR	1	12727			45-2			
0	26	" " Frame	1	"			45-3			
0	27	" " ~~Liner~~ HINGE PIN	1	"						
0	28	" " Latch STUD	1	"		45A5000				
0	29	" " THUMB ~~Handle~~ STUD NUT	1	"		5½" x 1" DIA.				
0	30	" " PEEP ~~Guide~~ HOLE COVER STUD	1	"		3½" x 5/8" "				
0	31	" " ~~Shield~~ DEFLECTOR	1	453C5008		3½" x 5/8" "				
0	32	" " Damper	1	12727						
0	33	" " " Bearing	1	"			45-4			
0	34	" " " "					45-5			

LED 60-11

Check	Item	
		GRO
0	1	Trus
0	2	"
	3	"
	4	"
0	5	"
0	6	"
0	7	"
	8	"
0	9	Fram
0	10	"
0	11	"
	12	"
0	13	"
	14	"
0	15	Fram
0	16	"
0	17	"
0	18	"
0	19	"
0	20	"
0	21	"
0	22	"
0	23	"
0	24	"
0	25	"
0	26	"
0	27	"
0	28	EXPA
0	29	"
	30	FURN
	31	"
	32	"
	33	"

	25	FIRE DOOR							
	26	" " Frame	1	12727					
	27	" " ~~Liner~~ HINGE PIN	1	"					
	28	" " Latch STUD	1	"					
	29	" " THUMB ~~Handle~~ NUT STUD	1	"					
	30	" " PEEP HOLE ~~Guide~~ COVER STUD	1	"					
	31	" " ~~Shield~~ DEFLECTOR	1	453C 5008					
	32	" " Damper	1	12727					
	33	" " " Bearing	1	"					
	34	" " " "	1	"					
	35	" " " Handle	1	"					
	36	" " " Thumb Nuts	1	"					
	37	" " Peep Hole Cover	1	"					
	38	" " DEFLECTOR SHAFT	1	453 C 5008					
	39	FRAME BOILER PAD CLAMPS	4	483 C 5051	PLATE				
	40	" " " "	4	483 F 5051					
	41	GROUP 48—FRAME AND DETAILS							
	42	FRAME							
	43	" Boiler Saddle Y BOLSTER	1	488A5053					
	44	" BOLSTER FILL BLOCK	1	483A5049					
	45	" " Pad Clamp	2	3895					
	46	" " " "	4	483E 5051					
	47	" " " "	2	483 D 5051					
	48	" " " "	1	483 B 5051					
	49	" CENTRE PLATE ~~Bolster Fill Blocks~~ REAR	1	483 A 5051					
	50	" Centre Plate FRONT	1	482 ~~M~~ 5111	Future consider making 1" higher for more clearance at truck				
	51	" Side Bearing—Right	1	482 A 5152					
	52	" " " —Left	1	488A5053					
	53	" Spreader	1	"					
	54	" Truss Pad	4	482 A 5010					
	55	" " "	4	482 B 5010					
	56	" " Head	4	12445 LINE 6					
	57	" " Post Head	4	12402					
	58	" " " Socket	4	482 A 5156					
	59	" " Rod Washers	8	3560 LINE 1					
	60	Main Truss Rod—Right	1	488A5053					
	61	" " " —Left	1	"					

45-2
45-3
45A 5000
5½" × 1" DIA.
3½" × 5/8"
3½" × 5/8"
45-4
45-5
45-6
380-S-40
380-S-39
45C 5002
¾" FIN SIZES
8" × 5½" × 6¼"
¾" FIN SIZES
8" × 5½" × 12"
48-89
48-688
1½" × 6" × 10"
1½" × 6" × 7¼"
1½" × 6" × 7¼"
1½" × 6" × 6¾"
FIN. SIZES.
48-656
48-689
3⅜" × 8¼" × 10½"
3⅜" × 5½" × 14"
3⅜" × 5½" × 14"
48-26
48-25
¾" × 20¼" × 60 9/16"
12445 LINE 6
48-28
48-692
48-43
2¾" DIA. - LENGTH
TO SUIT E. SHOP

	21	"
	22	"
	23	"
	24	"
	25	"
	26	"
	27	"
	28	EXPANSION
	29	"
	30	FURNACE
	31	"
	32	"
	33	"
	34	Boiler Pad
	35	"
	36	FRAME END
	37	" "
	38	GROUP 49
	39	
	40	
	41	
	42	GROUP 50
	43	Guide
	44	
	45	
	46	GROUP 51—GRATE
	47	Grate Arrangement
	48	GROUP 52—GRATE
	49	
	50	
	51	Grate Bars
	52	" "
	53	" "
	54	" Center Plate
	55	" Side
	56	" "
	57	" Cover Plate
	58	" "
	59	" Shaker
	60	" "
	61	" "

	25	" "	4	"		5/8 x 6" x 6" - 1 1/2" "				
	26	" "	2	"		1" 1/2 x 3" x 3" - 1 1/2" "				
	27	" Smoke Box Brace Pad	2	"		1" 1/2 x 3 1/2" x 3 1/2" - 7 1/2" "				
	28	EXPANSION PLATE	2	13007 SET 1		1" 1/2 x 3" x 3" - 9 1/2" "				
	29	" " Angle	1	482A 5199	PLATE	482A 5199	48-15			
	30	FURNACE BEARER—Front	1 SET	" "						
	31	" " —Rear								
	32	" " Plate								
	33	" " Fill Blocks								
	34	Boiler Pad—Right	3	482E 5015						
	35	" " —Left	3	"						
	36	FRAME END CASTING PLATE TOP	1	482A 5154	3/4 x 21" x 68" PLATE		48-624			
	37	" " " " BOTTOM	1	482B 5154	3/4 x 21" x 68" " "		48-624			
	38	GROUP 49—GAUGES, TEMPLATES & JIGS								
	39									
	40									
	41									
	42	GROUP 50—GUIDES & ATTACHMENTS								
	43	Guide	6	502B 5010	Released 12-7-27.		50-16	—	—	—
	44									
	45									
	46	GROUP 51—GRATE ARRANGEMENT								
	47	Grate Arrangement	—							
	48	GROUP 52—GRATE DETAILS								
	49									
	50									
	51	Grate Bars								
	52	" "								
	53	" "								
	54	" Center Rail								
	55	" Side "								
	56	" " "								
	57	" Cover Plate								
	58	" " "								
	59	" Shaker Pins								
	60	" " "								
	61	" " "								

NUMBERS

Mal. Iron	Check
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

LED 60-12

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 52—GRATE DETAILS (Cont.)								
	1	Grate Dead Plate								
	2	" " "								
	3	" Drop "								
	4	" Dump Shaft								
	5	" " " Bearing								
	6	" " " "								
	7	" " " Links								
	8	" " " Lever								
	9	" " Lever								
	10	" Shaker Shaft Bracket								
	11	" " " "								
	12	" " Lever								
	13	" " Shaft								
	14	" " "								
	15	" " " Lever								
	16	" " " "								
	17	" " " Hand Lever								
	18	" " " " "								
	19	" " Lever Connection								
	20	" " " "								
	21	" " Connection Bar								
	22	" " " "								
	23	GROUP 53—H'NDRAIL & STEPS (En.&Tr)								
	24	HAND RAIL	—							
0	25	" " Bracket	2	10010						
0	26	" " Balls	2	532E5034			53-10			
0	27	" " Columns	2	A-11406			53-4			
0	28	" " "	2	420-D-265			53-8			
0	29	" " "	2	A-11404			53-13			
	30	" " "					53-7			
0	31	" " " Blocks	2	532C5034		—				
0	32	" " CAB HANDLE (LEFT SIDE)	1	532B5002		532B5002	53-3			
0	33	" " Flanges	2	532F5034		—	—			
	34	Cab Handle Right					53-5			

LED 60-13

Check	Item	
	1	
0	2	
0	3	
0	4	
	5	
0	6	
0	7	
0	8	
0	9	
0	10	I
0	11	
0	12	
	13	
0	14	N
0	15	
0	16	E
0	17	N
0	18	P
	19	P
0	20	S
0	21	E
	22	
	23	
	24	G
0	25	In
0	26	
0	27	
0	28	
	29	
	30	In
0	31	

	25	" " Bracket	2	10010									23	
	26	" " Balls	2	532 E 5034			53-10						24	GR
	27	" " Columns	2	A-11406			53-4						25	Inj
	28	" " "	2	420-D-265			53-8						26	
	29	" " "	2	A-11404			53-13						27	
	30	" " "					53-7						28	
	31	" " " Blocks	2	532 C 5034									29	
	32	" " CAB HANDLE (LEFT SIDE)	1	532 B 5007		532 B 5007	—	53-3					30	Inj
	33	" " Flanges	2	532 F 5034			—	53-5					31	
	34	Cab Handle—Right FRONT	1	532 B 5053		532 B 5053							32	
	35	" " —Left.	1	532 A 5054		532 A 5054							33	Feed
	36	Coal Bunk Handle—Right	1	532 A 5053		532 A 5053							34	"
	37	" " " —Left	1	532 B 5054		532 B 5054							35	
	38	Tank Handle	—										36	
	39	End Timber Handle	1	213 A B 5059 50XX		53 E 5047							37	
	40	" " "	1	213 A B 5060 50XX		53 F 5047							38	
	41	" " " " Bracket	1	213 A B 5059 50XX		53 C 5008							39	
	42	" " " "	1	213 A B 5060 50XX		53 B 5008							40	
	43												41	
	44												42	
	45	Bottom Bracket Step	—										43	
	46	Cab Step RIGHT	1 SET	533 A 5014	PLATE	—							44	GR
	47	" " LEFT	1 "	533 A 5015		—							45	Inj
	48	" " "	1	"		53 B 5022							46	
	49	" " "	1	"		53 B 5022							47	
	50	" " Brace LEFT	2	"		53 D 5000							48	
	51	" " "											49	
	52	Cylinder Step											50	
	53	" Hood Step											51	Inj
	54	Generator Step											52	
	55	End Timber Step—Front	4	213 A B 5059 50XX		53 X 5013							53	
	56	" " " —Back	4	213 A B 5060 50XX		53 X 5013							54	
	57	~~Headlight Step~~ "	X	"		53 X 5013							55	
	58	~~Pilot Step~~ END TIMBER STEP	X	213 B 50XX		53 J 5013							56	
	59	" "	—			53 C 5007							57	
	60	Sand Box Step	2	532 A 279		53 C 5007	—	—	—	—			58	
	61	" " " Bracket	2	533 B 5003			53-14	—	—	—			59	
						533 B 5003	—	—	—	—			60	
													61	

	25	Injectors	2	NATHAN STD. MONITOR - PENNA. R.R. PAT. SCREW TYPE #8							
	26	" Bracket	2	TO SUIT ERECT SHOP		TO SUIT ERECT SHOP					
	27										
	28										
	29										
	30	Injector Check Valve	—								
	31	" " Flange + STOP	2	2" NATHAN FLANGE TYPE 280-A TO NATHAN CO 577							
	32	" Stop Valve									
	33	Feed Pipe Strainer									
	34	" " Bracket	2	552 A 5005			55-92				
	35	" " " Cap	2	"			55-94				
	36	" Pipe Hanger									
	37	" Hose Connection									
	38	" " " Nuts	4	553 A 5001			55-68				
	39	" " " "	4	"						55-69	
	40	" " " Nipples	4	"						55-70	
	41										
	42										
	43										
	44	GROUP 57—LAGGING & JACKET									
	45	Lagging (Boiler)	1 SET	57 M.O. 5003 MAGNESIA							
	46	" Panel									
	47	" "									
	48	" "									
	49	" Angle Iron									
	50	" " "	—								
	51	Jacket (Boiler)	1 SET	#22 B.W.G.	PAINTED STEEL		—	—	—	—	
	52	" Band	—								
	53	" " Angle	4	57 B 5000		57 B 5000					
	54	" Clamp	48	572 A 46							
	55	" "	6	572 B 5004		572 B 5004					57-28
	56	Plug Casing	8	572 A 6							—
	57	" "	—								57-4
	58	" ~~Cover~~ PRESSURE PLATE FRAME	1	420 D 476			—	—	57-60	—	
	59	Cylinder Lagging									
	60	" Jacket									
	61	" Hood	1	572 S 5008	PLATE	—	—	—	—	—	

ASTINGS—PATTERN NUMBERS		
Steel	Brass	Mal. Iron

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron	Check	Item	
		GROUP 58—LINK MOTION											GROUP
C	1	Link	3	583A 5001			—	58-7	—	—		1	Oil Bu
	2	" —Top Half										2	"
	3	" —Bottom Half										3	"
	4	" Saddle	3	583 A 5001		81-F-15						4	"
	5	" " Bolts	3	8511 SET 12								5	" C
	6	" " "	3	" " "								6	"
	7	" Block	3	582 A 5015		FIN SIZES 2" × 2 5/8 × 3 3/4"						7	"
	8	" " Pin	3	8512 SET 3								8	"
	9	" " Plates	6	582 A 5015	C. R. STEEL							9	"
	10	" " Ends										10	"
	11	" Hanger	3	582 A 5025		81-F-16						11	"
	12	" " Pin	3	8513 SET 1		—						12	" P
	13											13	"
	14	GROUP 59—OIL CUPS & LUBRICATION										14	"
	15	Lubricator	1	NATHAN 5 FEED 5 PINT 1918 TYPE - COMPLETE WITH STEAM VALVE								15	"
	16	" Bracket	1	TO SUIT ERECT SHOP		TO SUIT ERECT SHOP						16	"
	17	OIL PUMP	1	MANZEL 3 FEED 4 PINT OIL PUMP PAINTED BLACK - RATCHET DRIVE - REAR DISCHARGE								17	"
	18	Bottom Bracket Oil Cup	8	#1 LUNKENHEIMER POWELL - PLAIN STEEL - 1/2" P. THD. (FIG. 1089 FERRO)								18	" R
	19	" " " " Cap										19	"
	20	" " " " Nut										20	"
	21	" " " " Plug										21	"
	22	" " " " Cover										22	"
	23	" " " " "										23	"
	24	" " " " Hinge Lugs										24	"
	25	" " " " " "										25	"
	26	" " Grease Cup										26	"
	27	" " " " Cap										27	"
	28	" " " " Nut										28	"
	29	" " " " Plug										29	"
	30	Crosshead ~~Grease~~ Cup	3	#1 POWELL PLAIN STEEL - SHANK 1/4" PIPE THD.								30	"
	31	" " " Cap										31	"
	32	" " " Nut										32	"
	33	Ecc. Strap Oil Cup										33	"

	23	" " " " "										23	" "
	24	" " " " Hinge Lugs										24	" "
	25	" " " " " "										25	" "
	26	" " Grease Cup										26	" "
	27	" " " " Cap										27	" "
	28	" " " " Nut										28	" "
	29	" " " " Plug										29	" "
O	30	Crosshead ~~Oil~~ GREASE Cup	3	#1 POWELL PLAIN STEEL - SHANK ¼" PIPE THD.								30	" "
	31	" " " Cap										31	" "
	32	" " " Nut										32	" "
	33	Ecc. Strap Oil Cup										33	" "
	34	" " " " Cap										34	" "
	35	" " " " Nut										35	" "
	36	Gear Oil Cups										36	" Damper Re
	37	" " " Covers										37	" "
O	38	Guide ~~Oil~~ GREASE Cup	6	#3 POWELL PLAIN STEEL - SHANK ½" PIPE THDS.								38	" "
	39	" " " Cap										39	" "
	40	" " " Nut										40	" "
	41	Link Oil Cup										41	" ~~Heater~~
	42	" " " Cap										42	" " Stuffi
	43	" " " Nut										43	" "
	44	Packing ~~Oil~~ GREASE Cup										44	" "
	45	" " " Cap										45	" DAMPER C
	46	" " " Nut										46	" "
	47	Rod ~~Oil~~ GREASE Cup		—								47	" "
	48	" " " Cap										48	" "
O	49	" " " Plug	3	592 A 5025			59-355	—	—	—		49	" "
	50	" " " Latch										50	GROUP 61—PAINT
	51	" " " Spring										51	Lettering
	52	" " " Base										52	Numbering
O	53	Tumb. Shaft ~~Oil~~ GREASE Cup	3	#1 POWELL PLAIN STEEL - ¼" PIPE THD.								53	
	54	" " " " Cap										54	
	55	" " " " Nut										55	
O	56	Truck Box Oil Cup Cover—R. Box	6	TO SUIT TRUCK SHOP (PLATE)								56	
	57	" " " " " —L. Box										57	
	58	" " " " " Hinge Plate										58	
	59	Valve Stem Oil Cup										59	
O	60	Oil Can Shelf	1	592 A 5004			59-120	—	—	—		60	
	61	" " " Bracket	—									61	

	24	" " Quadrant	1	602A5012		118-F-309						
	25	" " Lever	1	602A5013								
	26	" " Latch	1	602A5015		118-F-3				60-18		
	27	" " " Handle	1	602A5016								
	28	" " " Spring	1	602C5021	BRASS WIRE					60-19		
	29	" " " Link	1	602A5021	MACH. STEEL							
	30	" " " Guide	1	602A5018								
	31	" " SHAFT ~~Rk~~ WASHER	1	602D5021	MACH STEEL					60-21		
	32	" " Lever Dowel	1	602B5021	STICK BRASS							
	33	" " " Stop	1	602A5012	PLATE							
	34	" " " Thumb Nuts										
	35	" " " Adjusting Screw										
	36	" Damper Regulator Quadrant	1	602A5047		602A5047				60-18		
	37	" " " Handle	1	602A5046								
	38	" " " Shaft	1	602A5049	1¼" PIPE 82" LONG							
	39	" " " " Bushing	2	602E5021	STICK BRASS							
	40	" " " " Arm	4	602A5035		602A5035						
	41	" ~~Heater~~ "										
	42	" " Stuffing Box										
	43	" " " " Follower										
	44	" " " " Nut										
	45	" DAMPER REGULATOR ASS'Y.	1	602A5049								
	46	" " " LATCH	1	602A5048		602A5048				60-19		
	47	" " " " HANDLE	1	602A5016								
	48	" " " " SPRING	1	602C5021	BRASS WIRE							
	49	" " " " LINK	1	602A5021	MACH. STEEL							
	50	GROUP 61—PAINT'G, LETTER'G, NUM'G										
	51	Lettering										
	52	Numbering										
	53											
	54											
	55											
	56											
	57											
	58											
	59											
	60											
	61											

CASTINGS—PATTERN NUMBERS Brass	Mal. Iron	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 60—OIL BURNER, ENGINE ONLY								
—	—		1	Oil Burner	1	3" A.B.C.	PURCHASED					
		✓	2	" " Arrangement	1	604 B 5002						
			3	" " Support	1	"		3/8" × 3" × 9"				
			4	" " Turret	1	C-11881						
			5	" Cock Rod	1	3/4" Pipe To Suit Erect Shop			60-3			
		✓	6	" " " Jaw	2	604 B 5002		118-F-186				
			7	" " " "	—							
			8	" " Shaft	+	602 E 5040		602E5040				
			9	" " " Arm	1	602 C 5009		602 C 5009				
			10	" " " ~~Hanger~~ Bracket	+	602A5044		602A5044				
			11	" " " Collar	—							
			12	" Pipe Support	—							
		✓	13	" " " Plate	1	604 B 5002		1/2" × 3" × 11"				
			14	" " Clamp	1	"		118-F-588				
			15	" " "	—							
		✓	16	" ~~Heater~~ Support Plate	2	604 B 5002		1/4" × 4 1/2" × 7"				
			17	" " Clamp	4	"		118-F-587				
			18	" Regulator Bracket	1	"		118-F-505				
			19	" " Shaft	1	"		60 U 5002				
			20	" " " Arm	1	602 C 5009		602 C 5009				
		✓	21	" " " Hanger	1	604 B 5002		60 D 5007				
			22	" " " Collar								
			23	" " " "								
			24	" " Quadrant	1	602A 5012		118-F-309				
			25	" " Lever	1	602A 5013		—			60-18	
			26	" " Latch	1	602A5015		118-F-3			—	
			27	" " " Handle		602A 5016					60-19	
			28	" " " Spring		602 C 5021	BRASS WIRE					
			29	" " " Link		602A 5021	MACH. STEEL					
			30	" " " Guide	1	602A 5018						
			31	" " SHAFT ~~Rod~~ WASHER	1	602 D 5021	MACH STEEL				60-21	
			32	" " Lever Dowel	1	602 B 5021	STICK BRASS					

REAR DISCHARGE

Check	Item	TITLE	No. Pcs.	DRAWING		FORGINGS	CASTINGS—PATTERN NUMBERS			
				Card No.	Construction Notes	Sketch No.	Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 62—PILOT AND SNOW PLOWS								
	1	PILOT								
	2	Pilot Band								
	3	" Bottom Plate								
	4	" Corner Iron								
	5	" Brace								
	6	" "								
	7	" "								
	8	" "								
	9	" " Rod								
	10	" Knee								
	11	" "								
	12									
	13									
	14	Snow Plow	—							
	15									
	16									
	17	GROUP 63—PIPE FITTINGS								
	18	Air Gauge Fitting								
0	19	" Pump Oil Fitting	1 SET	7138	STICK BRASS		—	—	—	—
	20	" " " " Nut								
	21	" " " " Swivel								
	22	" " Exhaust Wye								
	23	" " Tee								
	24									
	25									
0	26	Blower Fitting	1	632A 5004			—	—	—	63-6
	27	" " Nut	—							
0	28	Brake Release Check	1	13523	STICK BRASS		—	—	—	—
0	29	" " " Valve	1	"			—	—	—	63-64
0	30	~~Brake~~ ~~Ex.~~ ~~Fitting~~ MANZEL PUMP FITTING	6 SET	632B5007	STICK BRASS		Z	Z	Z	Z
0	31	" " " ~~Nut~~ LUBRICATOR DRAIN	1 "	"	" "					
0	32	~~Cool~~ ~~Sprinkler~~ ~~Fitting~~ FITTINGS E.T. AIR EQUIPT.	3 "	"	" "					
	33	" " " Nut								
	34	" " " Swivel								

Check	Item	T
		GROUP 63—PIPE
	1	Pipe Clamp
	2	" "
	3	" "
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	GROUP 64—PIPING
	15	Piping Arr'g. Gen
	16	" " Air
	17	" " Cooli
	18	" " Bet.
	19	" " Oil H
	20	" " Sprin
	21	" " Steam
0	22	" " - DAM
	23	
	24	
	25	
	26	GROUP 65—PISTON A
0	27	PISTON HEAD
0	28	" Packing Rin
0	29	" Rod
	30	
	31	
	32	
0	33	PISTON ROD PACK
	34	Packing Rings

	23	" " Tee										
	24											
	25											
0	26	Blower Fitting	1	632 A 5004		—	—	—	63-6	—		
	27	" " Nut	—									
0	28	Brake Release Check	1	13523	STICK BRASS	—	—	—	—	—		
0	29	" " " Valve	1	"								
0	30	~~Brake Ex. Fitting~~ MANZEL PUMP FITTING	6 SET	632B5007	STICK BRASS	—	—	—	63-64	—		
0	31	" " " ~~Nut~~ LUBRICATOR DRAIN	1 "	"	" "	Z	Z	Z	Z	Z		
0	32	~~Cool Sprinkler Fitting~~ FITTINGS E.T. AIR EQUIPT.	3 "	"	" "							
	33	" " " Nut										
	34	" " " Swivel										
0	35	Cylinder Oil Pipe Fitting	6 SET	632 A 5005	STICK BRASS							
	36	" " " " Nut										
	37	" " " " "										
	38	" " " " Swivel										
	39	" " " Bracket										
	40	Angle Valve Nut										
	41	" " Swivel										
	42	Through Valve Nut										
	43	" " Swivel										
	44	Oil Cock Nut										
	45	" " Swivel										
0	46	Lubricator Check										
	47	Steam Brake Oil Fitting	1 SET	7138	STICK BRASS							
	48	" " " " Nut	—									
	49											
	50	Check Pipe Union										
	51	" " " Nut										
	52	" " " Swivel										
	53	Oil Pipe Union										
	54	" " " Nut										
	55	" " " Swivel										
	56	Steam Pipe Union										
	57	" " " Nut										
	58	" " " Swivel										
	59											
	60											
	61											

	22	" " " DAMPER
	23	
	24	
	25	
	26	GROUP 65—PISTON AND
0	27	PISTON HEAD
0	28	" Packing Rings
0	29	" Rod
	30	
	31	
	32	
0	33	PISTON ROD PACKING
	34	Packing Rings
	35	" Spring Washer
	36	" Swab Cap
	37	" Follower
	38	" Stuffing Box
	39	" " " Gland
	40	" Vibrating Cups
	41	" Spring
	42	
	43	
	44	PACKING STUDS Piston
	45	GROUP 66—PLUGS
	46	Arch Tube Plug
0	47	Back Head Plug (Prime)
0	48	Crown Plug
	49	Ecc. Strap Plug
0	50	Firebox Plug (Prime)
	51	" "
	52	Fusible Plug
	53	Indicator Plug
	54	Smoke Box Plug
	55	Tube Sheet Plug
0	56	Test Plug
0	57	Waist Plug (Prime)
	58	Washout Plug Valve
	59	" " " Cap
	60	" " Flange
	61	" " "

	24											
	25											
	26	GROUP 65—PISTON AND ROD										
0	27	PISTON HEAD	3	652A 5134				65-100		BRONZE 65-7		
0	28	" Packing Rings, Material For	6	653H 5000	Pot Pattern							
0	29	" Rod	3	652A 5144		652A 5144		—				
	30											
	31											
	32											
0	33	PISTON ROD PACKING	3 SET GARLOCK METALPAC STYLE #806 - OUTSIDE CASE TO CD 7705 LINE 1									
	34	Packing Rings										
	35	" Spring Washer										
	36	" Swab Cap										
	37	" Follower										
	38	" Stuffing Box										
	39	" " " Gland										
	40	" Vibrating Cups										
	41	" Spring										
	42											
	43											
	44	PACKING STUDS Piston Rod										
	45	GROUP 66—PLUGS										
	46	Arch Tube Plug										
0	47	Back Head Plug (Prime)	3	1 7/8" - 11 1/2 THDS TAPER 3/4" IN 12" PURCHASED								
0	48	Crown Plug "	2	" " " " " "								
	49	Ecc. Strap Plug	—									
0	50	Firebox Plug (Prime)	4	1 7/8" - 11 1/2 THDS TAPER 3/4" IN 12 PURCHASED								
	51	" "										
	52	Fusible Plug										
	53	Indicator Plug										
	54	Smoke Box Plug										
	55	Tube Sheet Plug										
8	56	Test Plug	1	662B23								
0	57	Waist Plug (Prime)	5	1 7/8" - 11 1/2 THDS TAPER 3/4" IN 12 PURCHASED		—		—		66-21		—
	58	Washout Plug Valve										
	59	" " " Cap										
	60	" " Flange										
	61	" " "										

36 Hub Plate

TINGS—PATTERN NUMBERS		
el	Brass	Mal. Iron

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 68—REVERSE LEVER								
0	1	Reverse Lever	1			83-F-120				
0	2	" " Arrangement	1	683 F 5010						
0	3	" " Handle	1	682 D 173					68-3-A	
0	4	" " Latch	1	682 A 5039		83-F-49				
0	5	" " " Guide	1	"		1¼" × 2" × 3½"				
0	6	" " " Rod	1	"		83-F-109				
0	7	" " " ~~Rod~~ STEM GUIDE	1	"		¾" × 1" × 2 15/16"				
0	8	" " Quadrant	1	683 F 5010		83-F-107				
0	9	" " "	1	"		83-F-108				
0	10	" " " Plate	1	8328 SET 7 LINE 1	PLATE					
	11	" " Foot Rest	—							
0	12	" " Shaft	1	682 F 5042		682 F 5042				
0	13	" " " Length	—		8 1/16" CTR. TO CTR.					
	14	" " Arm								
	15	" " Fulcrum								
	16	" " " Bracket								
	17	" " " Pin								
0	18	" " Shaft Stand	1	5471 SET 2		83-F-65				
0 ✓	19	" " Quadrant Bracket	1	488A5053	682F5010	68 D 5012				
0 ✓	20	" " " "	1	"		109-F-170				
0	21	" " " " PLATE	1	683 D 5010	PLATE	3" 1" 1/16 × 4½ × 26"				
	22									
	23									
	24									
	25									
	26	GROUP 69—REVERSE SHAFT								
0	27	TUMBLING SHAFT	1	692 D 5052	ANGLE "B" - 5°	~~692 D 5052~~ 69 A 5004	—	—	—	—
	28	" " Arm	—							
	29	" " Collar	—							
0 ✓	30	" " Box	3	692 #B 5049	BABBITTED		69-10			
0 ✓	31	" " " Cap	3	692 #B 5029	"		69-9			
0	32	" " Coupling Ball	2	8340			69-58			
		" " " Socket	2	"			69-59			

Check	Item	
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	32	S
	33	D
	34	

	27	TUMBLING SHAFT									
	28	" " Arm	1	692D 5052	ANGLE "B" - 5°	692A 5004 692D 5052	—	—	—	—	
	29	" " Collar	—								
	30	" " Box	3	692 [illegible] 5049	BABBITTED						
	31	" " " Cap	3	692 [illegible] 5029	"						
	32	" " Coupling Ball	2	8340			69-10				
	33	" " " Socket	2	"			69-9				
	34	" " " " Cap	2	"			69-58				
	35	" " " Sleeve	1	"			69-59				
	36	" " " Conn.	1 R	"			69-[illegible]59				
	37	" " " "	1 L	"							
	38	" " " Nut	2	"		FIN SIZES 1¼" HEX - 2¾" LONG 1¼" HEX - 8 5/8" " 1¼" HEX - [illegible]8 5/8" 1¼" HEX - ¾" "					
	39										
	40	GROUP 71—RUNNING BOARDS									
	41	RUNNING BOARD	1 SET	717A5016		—					
	42	" " TENDER	1 "	713A5034		—					
	43	" " Bracket ON BOILER	1	712H5031		712H5031					
	44	" " "	—								
	45	" " "	1	DRILL TO SUIT ERECT SHOP		½" x 4" x 28"	—	—	—	—	
	46	" " "	1	" " " " "		½" x 4" x 31"	—	—	—	—	
	47	" " "	—								
	48	" " " Engine	1	712A5037	PLATE						
	49	" " " "	1	712B5037	"						
	50	" " " "	3	712C5037	"						
	51	" " " "	4	488A5053	"						
	52	" " " "	1	"	"	71D5004 71E5004					
	53	" " " "	1	A-10963 LINE 3	PLATE						
	54	" " " "	1	"	BAR IRON	3/4 x 2" x 35½					
	55	" " " Tender	1 R	A-10929 SET 6 LINE 1							
	56	" " " "	1 L	" " 6 " 2							
	57	" " " "	2 R	" " 5 " 1							
	58	" " " "	2 L	" " 5 " 2							
	59	" " " "	1	1611G LINE 5		71B5000					
	60	" " " "									
	61	" " " "									

	25	" "
	26	" "
	27	Air Sander
	28	" "
	29	Sand Box
	30	" "
	31	" "
	32	SAND BOX
	33	Back Sand
	34	" "
	35	" "
	36	" "
	37	" "
	38	" "
	39	" "
	40	" "
	41	FRONT
	42	" "
	43	" "
	44	" "
	45	" "
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	48	" "
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	50	" "
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	56	" "
	57	" "
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	23	" " " —Long	1	12LH 5004			73-20			
	24	" " Rod Handle	1	733C 5000		73A 5014	—			
	25	" " Rigging	1	732A 5027			73-6			
	26	" " Rod	2	733C 5000		$\frac{1}{4}$ x $1\frac{1}{4}$" x $17\frac{3}{4}$"				
	27	Air Sander	1	$\frac{3}{8}$" PIPE - LENGTH TO SUIT ERECT SHOP						
	28	" " Nozzle	2	732A 5002						
	29	Sand Box—Flue	2	"	STICK BRASS		73-93			
	30	" " Funnel	1	12227 LINE 1	PLATE					
	31	" " Scoop	1	732A 5033	GALV. IRON					
	32	SAND BOX—Back 1/39	1	"						
	33	Back Sand Box Arrangement	—	1-732A 5032						
	34	" " " Base								
	35	" " " Top								
	36	" " " Covers								
	37	" " " Valve								
	38	" " " Shaft Hanger								
	39	" " " " " Caps								
	40	" " " Hand Lever								
	41	FRONT SAND BOX LUGS ~~Fulcrum~~	4	733C 5000		530585	—			
	42	" " " " STUDS ~~Rod~~	4	"	$\frac{5}{8}$" DIA. 16" LONG THD. 2" BACK ON EACH END.					
	43	" " " Horiz. Lever								
	44	" " " " " Fulcrum								
	45	" " " " " Guide								
	46	" " " Rod Jaws								
	47	" " " " "								
	48	" " " Shaft								
	49	" " " " Lever								
	50	" " " " "								
	51	" " " Valve Lever								
	52	" " " " Rod								
	53	" " " " "								
	54	" " " " " Conn.								
	55	" " " Rod Bell Crank								
	56	" " " " " " Fulcrum								
	57	" " " Brace								
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 72—RODS								
	1	Connecting Rods	3	8980 LINE 4	723 D 5008	89-F-45			—	
	2	" " Brass, Xhd End	3	722 A 5059					72-29	
	3	" " " " "	3	"					72-29	
	4	" " " Crank "	3	722 A 5070					72-191	
	5	" " " " "	3	"					72-191	
	6									
	7	Connecting Rod Strap	3	722 B 5084		722 B 5084 FIN SIZES 1½" × 2¼" × 3"				
	8	" " Wedge—Top	3	8980 LINE 4		FIN SIZES 2" × 3½" × 4½"				
	9	" " " —Bottom	3	" "						
	10	" " Key—Top	3	" "		89-F-21				
	11	" " " —Bottom	3							
	12	" " Wedge Liner	3	8980 LINE 4		FIN SIZES ¼" × 3½" × 6¼"				
	13									
	14									
	15									
	16	GROUP 73—SAND BOX								
	17	Sand Box—Front	1	733 C 5000					—	
	18	" " Base	1	733 C 5013					73-17	
	19	" " Top	1	733 C 5000	PRESSED STEEL				—	
	20	" " Lid	1	732 B 5036 5000	FOR FUTURE NEW WORK & REPAIRS				73-401	
	21	" " Valve	2	732 A 5022					73-21	
	22	" " Lever—Short	1	732 A 5004					73-4	
	23	" " " —Long	1	733 C 5000					73-20	
	24	" " Rod Handle	1	732 A 5027		73 A 5014			—	
	25	" " Rigging	2	733 C 5000					73-6	
	26	" " Rod	1	⅜" PIPE - LENGTH TO SUIT ERECT SHOP		¼ × 1¼" × 17¾"				
	27	Air Sander	2	732 A 5002						
	28	" " Nozzle	2	"	STICK BRASS PLATE				73-93	
	29	Sand Box—Flue	1	12227 LINE 1						
	30	" " Funnel	1	732 A 5033	GALV. IRON					
	31	" " Scoop	1	"						
	32	SAND BOX—Back 1/39	1	732 A 5032						
	33	Back Sand Box Arrangement								
	34	" " " Base								
	35	" " " Top								

68-3-A

1-36" Hub Plate

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 74—SHAFTS								
	1	COUPLING RING —Front	2	743A5079				74-16	—	
	2	" " Half "	4	743B5010				74-17	—	
	3	" " Bushing "	8	742A5035				—	74-19	
	4	" " Oil Cellar " PLUG	8	742A5347	MACH. STEEL			—		
	5	" " —No. 2	2	743C5079				—		
	6	" " Half "	4	743D5010				74-21		
	7	" " Bushing "	8	742A5036				74-22		
	8	" " Oil Cellar " PLUG	8	742A5347	MACH. STEEL			—	74-24	
	9	" " —No. 3						—	—	
	10	" " ~~Half~~ OIL CELLAR PLUG SET SCREW	24	742B5347	PURCHASED.					
	11	" " Bushing "	24	742C5347	STICK BRASS					
	12	" " Oil Cellar "								
	13	" " —Rear	2	743A5079						
	14	" " Half "	4	743B5010				74-16		
	15	" " Bushing "	8	742A5035				74-17		
	16	" " Oil Cellar " PLUG	8	742A5347	MACH. STEEL			—	74-19	
	17							—	—	
	18	CRANK SHAFT	1	745 #B 5010	#54 NICKEL STEEL	157-F-20	—	—	—	—
	19	Counterbalance	2	15728						
	20	" Weight	2	"			74-864			
	21	" "	2	"			74-865			
	22	" "	6	"			74-866			
	23	" Yoke				157-F-2				
	24	" "								
	25	Horn Coupling	1	742B5267						
	26	" "	1	742B5199				74-27		
	27	" " Key	2	9060 LINE 2		90-F-2		74-179A		
	28							—		
	29									
	30	LINE SHAFT—Front Truck	1	9169 LINE 2	NICKEL STEEL	FIN. SIZES 82 7/8" X 4" DIA.				
	31	" " —2nd "	1	"	" "	FIN. SIZES 90 1/8" X 5" DIA.				
	32	" " —3rd "	—							
	33	" " —Rear "								
	34	" " Bearings, Outside—Front	1	9169 LINE 2	NICKEL STEEL	FIN. SIZES 87 3/8" X 4" DIA.				

LED 60-20

LED 60-21

Check	Item	TITLE
		GROUP 74—SHAFTS (Cont.)
	1	LINE SHAFT Coupling Key
	2	" " " "
	3	" " " "
	4	" " Collar "
	5	" " Pinion
	6	" " "
	7	" " "
	8	" " "
	9	" " Washer
	10	" " "
	11	" " "
	12	" " "
	13	GEAR RIM
	14	" " Bolt
	15	" " Key
	16	SQUARE SHAFT—Front
	17	" " —Back
	18	" " —Center
	19	" "
	20	" " Sleeve
	21	" " "
	22	" " "
	23	" " "
	24	
	25	
	26	GROUP 75—SMOKE BOX AND STA
	27	SMOKE BOX ARRANGEMENT
	28	" " Deflecting Plate
	29	Deflecting Plate Angle
	30	Draft Pipe
	31	" " Hanger
	32	" "

	25	Horn Coupling	1	742 B 5267															
	26	" "	1	742 B 5199															
	27	" " Key	2	9060 LINE 2															
	28																		
	29																		
	30	LINE SHAFT—Front Truck	1	9169 LINE 2	NICKEL STEEL	FIN. SIZES 82 7/8" X 4" DIA.													
	31	" " —2nd "	1	"	" "	FIN. SIZES 90 1/8" X 5" DIA.													
	32	" " —3rd "	—																
	33	" " —Rear "	1	9169 LINE 2	NICKEL STEEL	FIN. SIZES 87 3/8" X 4" DIA.													
	34	" " Bearings, Outside—Front	2	742 E 5097															
	35	" " " Inside "	2	"															
	36	" " " Outside—2nd	2	742 D 5097															
	37	" " " Inside "	2	"															
	38	" " " Outside—3rd	—																
	39	" " " Inside "	—																
	40	" " " Outside—R'r	2	742 E 5097															
	41	" " " Inside "	2	"															
	42	" " " Plate—Front	2	742 K 5065		FIN. SIZES. 1/2" X 5 3/8" X 10 1/2"													
	43	" " " " —2nd	2	"															
	44	" " " " —3rd	—			FIN. SIZES 1/2" X 5 3/8" X 10 1/2"													
	45	" " " " —Rear	2	742 K 5065															
	46	" " Collar	1	742 A 5212		FIN. SIZES 1/2" X 5 3/8" X 10 1/2"													
	47	" " "	1	742 H 5197															
	48	" " "	1	742 E 5093															
	49	" " "	1	742 C 5197															
	50	" " "	2	742 B 5212															
	51	" " "																	
	52	" " "																	
	53	" " "																	
	54	" " "																	
	55	" " Coupling	2	742 C 5273	12														
	56	" " "	1	742 A 5239	15														
	57	" " "	1	742 A 5280	10														
	58	" " "																	
	59	" " "																	
	60	" " "																	
	61	" " "																	

	24												
	25												
	26	GROUP 75—SMOKE BOX AND STACK											
	27	SMOKE BOX ARRANGEMENT	1 SET	813 A 5006									
	28	" " Deflecting Plate	1	752 A 5007									
	29	Deflecting Plate Angle	1	"									
	30	Draft Pipe	1 SET	813 A 5006									
	31	" " Hanger	2	"									
	32	" " "	2	"									
	33	" " " KEY BOLTS	2	"									
	34	" " " Key Bolt											
	35	Netting Frame											
	36	" Ring											
	37	Cinder Pocket											
	38	" Pot Base											
	39	" " Lid											
	40	" " Hand Wheel											
	41	" " Yoke											
	42	Cleaning Hole											
	43	" " Flange											
	44	" " Cover											
	45	Peep " Flange	2	752 A 5054									
	46	" " Cover	2	752 A 5055									
	47	SMOKE BOX Brace—Right	1	752 A 5018									
	48	" " " —Left	1	"									
	49	" " " Pad	2	752 A 5047									
	50	" " " Pin	2	13002 STYLE 2									
	51	" " " Washer	2	13003 " 2									
	52	SMOKE BOX FRONT	1	A-12964 LINER	PLATE								
	53	" " " Door	1	" "	"								
	54	" " " Liner											
	55	" " Door Liner											
	56	" " " Buttons	15	752 A 5079									
	57	" " " Hinge	1	"									
	58	" " " "	1	"									
	59	" " " " Lug	1	"									
	60	" " " " "	1	"									
	61												

14-458

See letter in front of book

75 A 5033
75 A 5032
75 A 5030

752 A 5018
"

75-61
75-66

75-10 ✓

75 A 5000
75 A 5003

75-455

75-25
75-26

CASTINGS—PATTERN NUMBERS		Check	Item	TITLE	No. Pcs.	DRAWING		FORGINGS	CASTINGS—PATTERN NUMBERS			
Brass	Mal. Iron					Card No.	Construction Notes	Sketch No.	Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 74—SHAFTS (Cont.)								
—			1	LINE SHAFT Coupling Key	—							
—		✓	2	" " " "	1	9169 LINE 2		FIN. SIZES 1" 3/4" X 1 7/8" X 5 1/4"	—	—	—	—
74-19			3	" " " "	—							
			4	" " Collar "	—							
		✓	5	" " Pinion	4	742 B 5317		—	—	74-472-A	—	—
74-24		✓	6	" " "	2	742 A 5317		—	—	74-472	—	—
—			7	" " "								
			8	" " "								
		✓	9	" " Washer	4-PR.	742 A 5147		—	74-141	—	—	—
—	—	✓	10	" " "	2-PR.	742 C 5147		—	74-142	—	—	—
—	—		11	" " "								
			12	" " "								
74-19	—	✓	13	GEAR RIM	6	742 C 5269			—	74-807	—	—
		✓	14	" " Bolt	48	742 C 5254			—	—	—	—
		✓	15	" " Key	24	742 E 5007			—	—	—	—
		✓	16	SQUARE SHAFT—Front	1	742 K 5250	Sent 1-10-21-1946-H.C.H.	742 K 5250	—	—	—	—
		✓	17	" " —Back	1	742 D 5250		742 D 5250	—	—	—	—
—	—	✓	18	" " —Center	1	742 F 5245		742 F 5245	—	—	—	—
			19	" "								
		✓	20	" " Sleeve	1	742 C 5110			—	74-281 ✓	—	—
		✓	21	" " "	1	742 A 5110	Sent 1-742-A-5338-10-21-1946-H.C.H.		—	74-315 ✓	—	—
		✓	22	" " "	1	742 B 5181			—	74-458 ✓	—	—
			23	" " "								
			24									
			25									
			26	GROUP 75—SMOKE BOX AND STACK								
		✓	27	SMOKE BOX ARRANGEMENT	1 SET	813 A 5006						
		✓	28	" " Deflecting Plate	1	752 A 5007						
		✓	29	Deflecting Plate Angle	1	"						
—	—	✓	30	Draft Pipe	1 SET	813 A 5006						
—	—	✓	31	" " Hanger	2	"		75 A 5033				
		✓	32	" " "	2	"		75 A 5032				
—	—	✓	33	" " " Key Plate	2	"						

New letter on Drawing

LED 60-22

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 75—SMOKE BOX & STACK (Cont.)								
✓	1	SMOKE STACK (Type TAPER)	1	752 A 5077	PLATE ¼"		—	Z	Z	Z
✓	2	Smoke Stack Base	1	"			75-384			
	3	" " Extension								
	4	" " Top								
	5	" " Cone								
	6	" " " Bracket								
	7	" " " Brace								
	8	" " " "								
	9	" " Cleaning Hole								
	10	" " " " Cap								
	11	" " Hood								
✓	12	" " Ring	1	752 A 5077		75 K 5009	—	—	—	—
	13	" " "								
	14	" " " Angle								
✓	15	" " Saddle	1	752 A 5077			75-110	—	—	—
	16									
	17									
	18	GROUP 76—SPRINGS								
✓	19	Truck Bolster Springs	60	762 A 5010	PURCHASED					
	20	" Pedestal "	—							
	21	Drawgear Springs	—							
	22									
	23									
	24									
	25									
	26	GR'P 78—STE. GAUGE SAF. VAL. & TUR.								
✓	27	Steam Gauge	1	5½" ASHCROFT - BRASS RING						
	28									
✓	29	Safety Valve	2	2" CONSOLIDATED "200# FORM "H" TYPE "FH"						
	30	" "								
	31	" " Elbow								
✓	32	" " Turret	1	782 H 5003			—	78-7		
✓	33	" " ~~Casing~~ CASING BEADING ~~Pushing~~	1	782 A 5006		114-F-65	—			

LED 60-23

Check	Item	
		GROUP 8
✓	1	Superhea
✓	2	"
✓	3	"
	4	"
	5	"
	6	"
	7	"
	8	"
	9	"
	10	"
	11	"
	12	"
	13	"
	14	"
	15	"
	16	"
	17	"
	18	"
	19	"
	20	"
	21	"
	22	"
	23	"
	24	"
	25	"
	26	"
	27	"
	28	"
	29	"
	30	"
	31	"
	32	"
✓	33	"

	26	GR'P 78—STE. GAUGE SAF. VAL. & TUR.										
0	27	Steam Gauge	1	5½" ASHCROFT - BRASS RING								
	28											
0	29	Safety Valve	2	2" CONSOLIDATED 200# FORM "H" TYPE "FH"								
	30	" "										
	31	" " Elbow										
0 ✓	32	" " Turret	1	782 H 5003								
0	33	" " " ~~Casing~~ CASING BEADING ~~Finishing~~	1	782A 5006								
0	34	" " " Ring	1	792 N 5005		114-F-65	—	78-7 ✓				
0	35	" " " Casing	1	782 A 5006	SHEET STEEL		79-14					
0	36	" " " " ~~Elbow~~ BRACKETS	2	"								
0	37	TURRET	1	783 U 500 C		78A 5000						
0	38	" Ball Joint	1	A-11424 SET I LINE I								
0	39	" Stuffing Box	1	782 A 5005								
0	40	" " " Nut	1	"	STICK BRASS							
	41	" " " Follower	—									
0	42	" Master Valve	1	782 A 5005								
0	43	" " " Nut	1	"	STICK BRASS							
0	44	" " " Stem	1	"	"							
0	45	" " " Hand Wheel	1	"								
0	46	" Bonnet Ring	1	"			27-14					
	47	Turret (Auxiliary)					—					
	48	GROUP 79—STEAM PIPES & TEE HEADS										
0	49	STEAM PIPES										
0	50	" " Slip Joint	1	792 A 5019	5" W.I. PIPE							
0	51	" " " " Gland	1	792 A 5009			—					
0	52	" " Elbow	1	"			79-551					
0	53	" " " Support	1	792 A 5015			79-552					
	54	" " Tee Head	1	914 A 5003			79-581					
0	55	" " Joint Ring—Top	—			79 C 5002	—					
	56	" " " " —Bottom	2	792 C 5029								
P	57	" " SLIP JOINT PACKING	X SET	LATEST VIEW RING PACKING - PURCHASED			79-11	—	—	—		
	58	" " " " Gland										
0	59	" " Casing	2	792 A 5008								
	60	" " Flange					79-550	—	—	—		
	61	" " Nipple										

	24	"	
	25	"	
	26	"	
	27	"	
	28	"	
	29	"	
	30	"	
	31	"	
	32	"	
0	33	"	
0	34	"	
0	35	"	
	36	GROUP 82—T	
0	37	TANK Valv	
0	38	"	
0	39	"	
0	40	"	
0	41	"	
0	42	"	
0	43	"	
0	44	"	
0	45	"	
0	46	"	
0	47	"	
0	48	"	
	49	Siphon Arra	
	50	Siphon	
	51	" Tube	
	52	" Pipe	
	53	" Goose	
	54	" Stand	
	55	"	
	56	"	
	57	" Hose	
	58	"	
	59	"	
	60	"	
	61	"	

36 [illegible] Hub Plate

	24	" " " Bearing								
	25	" " " "								
	26	" " " "								
	27	" " " "								
	28	" " " Link								
	29	" " Counterweight								
	30	" " " Arm								
	31	" " Hinge								
	32	" " Flag								
0	33	" Deflector Handle	4	752 A 79		75 A 139				
0	34	" " Clamp	4	812 B 51		3/4" × 2 1/2" × 4"				
0	35	" " Plate Stud	6	812 A 51		812 A 51				
	36	GROUP 82—TANK VALVES								
0	37	TANK Valve—Water	2	823 A 5006						
0	38	" " Body	2	"						
0	39	" " " Plate	2	"						
0	40	" " Bottom Plate	2	"						
0	41	" " Top "	2	"						
0	42	" " Cap	2	"						
0	43	" " Seat	2	"						
0	44	" " Stem	2	A-15147 STYLE I		151-F-2				
0	45	" " " Nut	2	823 A 5006						
0	46	" " " Handle	2	"						
0	47	" " " Clamp Nut	2	"						
0	48	" " Strainer	2	"						
	49	Siphon Arrangement								
	50	Siphon								
	51	" Tube								
	52	" Pipe Flange								
	53	" Goose Neck								
	54	" Stand Pipe								
	55	" " " Flange								
	56	" " " "								
	57	" Hose Strainer								
	58	" " " Body								
	59	" " " Cap								
	60	" " Nipple								
	61	" " Bracket								

78-1
78-5
78-2
—
78-3
78-4
— —
— —

82-22
82-23
82-19
82-20
82-18
82-16
82-21
82-17
82-14
82-15
—

36 10" Hub Plate

S—PATTERN NUMBERS		Check	Item	TITLE	No. Pcs.	DRAWING		FORGINGS	CASTINGS—PATTERN NUMBERS			
Brass	Mal. Iron					Card No.	Construction Notes	Sketch No.	Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 81—SUPERHEATER								
Z	Z	A	1	Superheater Arrangement	1 SET	81 M.O. 5014						
		A	2	" Header	1	812 A 5003	PURCHASED					
		A	3	" " Support	1 PAIR	812 C 5012		812 C 5012	—	—	—	—
			4	" " "								
			5	" Return Bends								
			6	" " "								
			7	" Tube End								
			8	" " Joint								
			9	" " Clamp								
			10	" " " Washer								
			11	" " " Bolt								
—	—		12	" " " " Washer								
			13	" " Support								
			14	" " Bands								
—	—		15	" Unit								
			16	" Damper								
			17	" " Cyl.								
			18	" " " Arm								
			19	" " " Support								
			20	" " Arm								
			21	" " Rod								
			22	" " Shaft								
			23	" " "								
			24	" " " Bearing								
			25	" " " "								
			26	" " " "								
			27	" " " "								
			28	" " " Link								
			29	" " Counterweight								
			30	" " " Arm								
			31	" " Hinge								
			32	" " Flag								
Z	Z	C	33	" Deflector Handle	4	752 A 79		75 A 139	Z	Z	Z	Z
		O	34	" " Clamp	4	812 B 51		3" × 24" × 4"				
		O	35	" " Plate Stud	6	812 A 51		812 A 51				

36 1" Hub Plate

	25	Fuel Bunk										
	26	" " Rack										
	27	" " Tie Rod										
	28	" " Straps										
	29	" " Lugs										
	30	" " Gate										
	31											
	32											
0	33	GROUP 85—TENDER FRAME ARRGT.	1	854 B 5001								
0	34	Tender Frame	1	16116 LINE #8								
0	35	" " Angle	12	"		5/8" × 6" × 6" - 9 1/2" LONG						
0	36	" " "	4	"		5/8" × 3 1/2" × 6" - 9 1/2" "						
0	37	" " "	12	"		5/8" × 3 1/2" × 3 1/2" - 9 1/2" "						
0	38	" " "	2	"		5/8" × 3" × 5" - 25 1/4" "						
0	39	" " ~~Bolster—Top~~	2	"		1/2" × 3" × 3" - 24" "						
0	40	" " BRACE—~~But.~~	2	"	PLATE	1/2" × 14" × 24"						
	41	" " Brace										
	42	" " "										
	43	" " "										
0	44	Frame Centre Plate	1	482 B 5111								
0	45	" End Casting	1	853 B 5001								
0	46	" " Timber Brace	2	482 B 5078								
0	47	" Side Bearings	2	16116 LINE #8		3 3/8" × 5 1/2" × 14						
	48	GROUP 87—TENDER DECK, TOOL BOX										
	49	Tool Box										
0	50	TANK - OIL HEATER PIPE BUSHING	1	882 A 5019	STICK BRASS	—						
	51	GROUP 88—TENDER TANK										
0	52	Tank—Water	1	883 A 5044								
0	53	" Material Bill	1 SET	88 M.O. 5048								
0	54	" Funnel	1	882 D 5018	PLATE							
0	55	" " Lid	1	"	"							
0	56	" " Hinge	2	"		151-F-97						
0	57	" " Handle	1	"		151-F-98						
0	58	" " Hinge Lug	2	"		151-F-96						
0	59	" " " Pin	2	"		—						
0	60	" " Angle	1	"		88 A 5001						
0	61	" Lug	4	882 A 5016		882 A 5016						

48-656 ✓
85-21 ✓
48-57 71

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 82—TANK VALVES (Cont.)								
	1	Tank Valve—Oil	1	822 E 5029			—		82-53	
	2	" " Seat	1	"			82-54			
	3	" " Cap Plate	1	"			82-55			
	4	" " Plate	1	"			82-56			
	5	" " Rod	1	"	LENGTH TO SUIT E. SHOP	151-F-55				
	6	" " Screen	1	"	4" PIPE - 4 1/8" LONG.					
	7	" " Nut	1	"	BAR STOCK					
	8	" " Flange	1	~~H305 SET~~	822F5002		82-39			
	9	" " Lever	1	B-15113		151-F-25	—			
	10	" " Stem	1	B-15115 LINE 5		37 1/2" x 5/8" DIA.			—	
	11	" " " End	1	822A 5022	STICK BRASS				—	
	12	" " " Stuffing Box	1	A-15171					82-58	
	13	" " " " " Nut	1	"					82-57	
	14	" " " " " Gland	1	"					82-60	
	15	" " " " " Follower	1	"	STICK BRASS					
	16	" Cock	~~1~~	~~1" STOP COCK~~						
	17	" Cooler Cock	—							
	18	Tank Measuring Rod	1	823H5005		FIN. SIZES 3/8" x 1" x 70 1/2"				
	19	" " " Flange	1	A-15130			82-132			
	20	" " " Handle	1	"			82-133			
	21	" " " Guard	1	"	30" x 1 1/4" PIPE					
	22	" " " "	1	"	15" x 1 1/4" "					
	23									
	24	GROUP 83—TANK—ENGINE								
	25	Fuel Bunk								
	26	" " Rack								
	27	" " Tie Rod								
	28	" " Straps								
	29	" " Lugs								
	30	" " Gate								
	31									
	32									
	33	GROUP 85—TENDER FRAME ARRGT.	1	854B5001						
	34	Tender Frame	1	16116 LINE #8		5/8" x 6" x 6" - 9 1/2" LONG				
	35	" " Angle	12	"						

Check	Item	
		GROUP 88—
	1	Tank—Hea
	2	" —Lad
	3	" "
	4	" —ST
	5	" —Fue
	6	" —Sho
	7	" ST
	8	Tank—Oil
	9	" Mater
	10	" Funne
	11	" "
	12	" "
	13	" "
	14	" "
	15	" "
	16	" "
	17	" "
	18	" "
	19	" Lug
	20	" "
	21	GROUP 91—
	22	Throttle A
	23	Throttle V
	24	" C
	25	" V
	26	"
	27	" P
	28	" P
	29	"
	30	" B
	31	" Pi
	32	" P
	33	"
	34	"
	35	"
	36	" Stu

36 Hub Plate

	24	" Case	1	912 A 5013							
	25	" Valve Stem	1	912 D 5008		912 D 5008	91-10-F				
	26	" " " Stop					—	—	—	—	
	27	" Pipe Elbow									
	28	" Pipe Flange									
	29	" " Joint Ring									
	30	" Bell Crank	1	B-12143		B-12143	—	—	—	—	
	31	" PIPE SUPPORT ~~Fulcrum~~	1	914 A 5003		91 A 5004					
	32	" Pipe Support	1	914 A 5003		91 A 5003					
	33	" " Yoke	1	"		121-F-206					
	34	" " Bracket									
	35	" " BRACKET	1	12184 SET 3		3/4" x 2 1/2" x 23 1/2"					
	36	" Stuffing Box X	1	912 A 5050							
	37	" " " Gland X	1	"			91-14 91-15				
	38	" " " Flange									
	39	" Baffle Plate									
	40	" " "									
	41	" " " Handle									
	42	" " " Angle									
	43	" " " Studs									
	44	" " " Nuts									
	45	" " " Keys									
	46	THROTTLE LEVER	1	913 F 5018		91 J 5029					
	47	Throttle Lever Handle	1	682 D 173		—			68-3 A		
	48	" " Latch	1	913 F 5018		1/4" x 2 1/2" x 5 1/4"					
	49	" " " Rod	1	"		91-R-5028	121-168 FOR ALL NEW WORK				
	50	" " Links	2	"	LENGTH TO SUIT SHOP	91 B 5016					
	51	" " Quadrant	1	"				91-21			
	52	" " Fulcrum	1	"		91 B 5030					
	53	" " Guide	—								
	54	" " Rod	1	913 F 5018		91 E 5031					
	55	" " Support	+	—		121-F-75					
	56	DRY PIPE X	1	912 A 5015	5" STEEL TUBING		91-371				
	57	" " Ring X	1	912 A 5012							
	58	" " Support X	1	912 A 5016		91 A 5001					
	59	" " " CLAMP X	1	"		91 A 5002					
	60	" " ~~Joint~~ RING X	2	792 C 5029		—	79-11				
	61	" " Elbow X	1	912 A 5011		—	91-370				

36 Hub Plate

PATTERN NUMBERS Brass	PATTERN NUMBERS Mal. Iron	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	CASTINGS—PATTERN NUMBERS Cast Steel	CASTINGS—PATTERN NUMBERS Brass	CASTINGS—PATTERN NUMBERS Mal. Iron
				GROUP 88—TENDER TANK (Cont.)								
82-53		g	1	Tank—Headlight Bracket	2	883 A 5044		100-F-4				
		g	2	" —Ladder 1R	1 PR.	882 J 5006		882 J 5006				
		g	3	" " 1L								
		g	4	" —~~Coal Gate~~ STRAINER	1	882 A 5017	#12 B.W.G. $2\frac{1}{2}$" × $2\frac{1}{2}$" MESH					
		g	5	" —~~Fuel Rack~~	1	882 B 5017	#12 " " " "					
		g	6	" —Shoveling Sheet	2	$\frac{3}{16}$" × $30\frac{1}{4}$" × 110"	PLATE					
		g	7	" STRAINER" RING	1	882 A 5017		88 A 5009				
		g	8	Tank—Oil	1	882 B 5017		88 B 5009				
		g	9	" Material Bill	1 SET	88 M.O. 5024						
—		g	10	" Funnel	1	B-15108 LINE 3	PLATE					
—		g	11	" " Cover	1	"	PLATE					
82-58		g	12	" " " Eye Bolts	2	"		470-S-143				
82-57		g	13	" " " Tail Nuts	2	"		470-S-13				
82-60		g	14	" " " Handle	1	"		151-F-98				
		g	15	" " Lug	2	"		470-S-144				
		g	16	" " "	1	"		470-S-145				
		g	17	" " Ring	1	"		151-F-105				
		g	18	" " Angle	1	"		151-F-110				
		g	19	" Lug	3	882 A 5014		882 A 5014				
		g	20	" "	2	882 A 5015		882 A 5015				
			21	**GROUP 91—THROTTLE & DRY PIPE**								
		g	22	Throttle Arrangement	1	914 A 5003						
		g	23	Throttle Valve	1	912 A 5079			91-7			
		g	24	" Case	1	912 A 5013			91-10-F			
		g	25	" Valve Stem	1	912 D 5008		912 D 5008	—	—	—	—
			26	" " " Stop								
			27	" Pipe Elbow								
			28	" Pipe Flange								
			29	" " Joint Ring								
		g	30	" Bell Crank	1	B-12143		B-12143	—	—	—	—
		g	31	" PIPE SUPPORT ~~Fulcrum~~	1	914 A 5003		91 A 5004				
		g	32	" Pipe Support	1	914 A 5003		91 A 5003				
		g	33	" " Yoke	1	"		121-F-206				
			34	" " Bracket	2	121 A Set 2						
		g	35	" " Bracket	1	121 B Set 2		3" × $2\frac{1}{2}$" × $2\frac{1}{2}$"				
			36	Hub Plate								

LED 60-26

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 92—TOOLS								
	1	Brake Shoes								
	2	Chisel—Cape								
	3	" —Flat								
	4	Hammer—Soft			Wood Handle					
	5	Jack Screw								
	6	" " Cap								
	7	" " Base								
	8	" " Collar								
	9	" "								
	10	" " Cap								
	11	" " Base								
	12	" " Collar								
	13	Journal Brass Rod								
	14	Packing Hook								
	15	" Spade								
	16	Pinch Bar								
	17	Jack Bar								
	18	Torch								
	19	" Cap								
	20	" Nozzle								
	21	Valve Tram								
✓	22	Wrench List	1 SET	92 M.O. 5000-C		—	—	—	—	—
	23	Ash Hoe								
	24	" " Handle								
	25	Clinker Hook								
	26	Poker								
✓	27	Wrecking Frogs	1 PR.	JOHNSON FOR 40# RAIL		—	—	—	—	—
✓	28	~~Grease~~ TOOL BOX	— 1	922A5011	1/8" PLATE-LOCATE ON REAR OF TENDER FRAME					
✓	29	~~Oil~~ TOOL EQUIPMENT	1 SET	923 A 5004		—	—	—	—	—
	30	GROUP 93—TRUCKS & DETAILS								
✓	31	TRUCK Plan	3	937A5008	—	—	—	—	—	—
✓	32	" Bolster	3 SET	933A5123		—	—	—	—	—
	33	" " End Casting—R.	—							
	34	" " " " L	—							
	36	Hub Plate	—							

LED 60-27

Check	Item	TI
		GROUP 93—TRUCK
✓	1	Truck Crosstie Ba
✓	2	" " "
	3	" " "
	4	" " "
✓	5	" " "
✓	6	" " "
✓	7	" " "
	8	" " "
	9	" " "
✓	10	" Diagonal Br
	11	" "
	12	" "
	13	" "
✓	14	" Equalizer
✓	15	" Gear Cover
✓	16	" " "
✓	17	" " "
	18	" " "
✓	19	" " "
	20	" " "
	21	" " "
	22	" " "
	23	"
✓	24	" King Bolt
✓	25	" " " K
✓	26	" Safety Chai
✓	27	" " "
✓	28	" " "
	29	
	30	
✓	31	TRUCK BOX—Ri
	32	" " "
	33	" " "
	34	" " "

	23	Ash Hoe									
	24	" " Handle									
	25	Clinker Hook									
	26	Poker									
0	27	Wrecking Frogs	1 PR.	JOHNSON FOR 40# RAIL	—	—	—	—	—	—	
0	28	~~Grease~~ TOOL BOX	—	922A5011	1/8 PLATE-LOCATE ON REAR OF TENDER FRAME						
0	29	~~Oil~~ TOOL EQUIPMENT	1 SET	923A5004	—	—	—	—	—	—	
	30	GROUP 93—TRUCKS & DETAILS									
0	31	TRUCK Plan	3	937A5008	—	—	—	—	—	—	
0	32	" Bolster	3 SET	933A5123		—	—	—	—	—	
	33	" " End Casting—R.	—			—	—	—	—	—	
	34	" " " " —L.	—								
0	35	" " " Separator	6	932A5300		—	—	93-163	Z	Z	
0	36	" " Spring Centers	120	A-9548 LINE 2		—	93-53	—			
	37	" "	—								
	38	" "	—								
0	39	" " Brake Rod Roller	6	9843 SETS	6½" X 1¼" DIA.	—	—	—	—	—	
0	40	" " " " " Brkt.	12	" "	98-F-30	—	—	—	—	—	
	41	" " " Lever Guide	—								
	42	" " " " "	—								
0	43	" Center Plate	3	932A5429		—	—	93-741	—	—	
0	44	" Side Bearing Base	6	932A5250		—	93-6		—	—	
0	45	" " " Block	4	932 X5243	MIDDLE + REAR.	—	93-428	—	—	—	
			2	932 L5243	FRONT TRUCK		93-58				
	46	" Frame									
	47	" "									
	48	" " Splice									
	49	" " "									
0	50	" Right Arch Bar	5 3	932A5136	1¾" X 4" X 98"						
0	51	" Left Arch Bar	3	932A5136	1¾" X 4" X 98"						
0	52	" Right Inverted Arch Bar	3	932 B5134	932 B5134						
0	53	" Left Inverted Arch Bar	3	932 B5135	932 B5135						
0	54	" Bottom Tie Bar RIGHT	3	932 K5077	1¾" X 4" X 80"						
0	55	" " " " LEFT	3	932 L5077	1¾" X 4" X 80"						
0	56	" " " " Angle RIGHT	3	932 K5077	¾" X 4" X 3" ANGLE						
0	57	" " " " " LEFT.	3	932 L5077	¾" X 4" X 3"						
	58	" " " Fill. Block	—								
0	59	" Column—Right	3	932A5110		—	—	93-623	—		
0	60	" " —Left	3	932A5111		—	—	93-624	—		
	61										

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on future use.

		23	"										
	0	24	" King Bolt	3	10153 SETS		10153 SETS	✓	—	—	—	—	
	0	25	" " " Key	3	" " 4		10153 " 4	✓	—	—	—	—	
—	0	26	" Safety Chain—To Frame LEFT ENG.	2	937A5808		101-F-53	✓	〃	〃	〃	〃	
—	0	27	" " " " " RIGHT ENG	2	"		101-F-50	✓					
—	1	28	" " " " " TENDER.	2	"		101-F-181	✓					
—		29											
		30											
—	0	31	TRUCK BOX—Right	6	933A5038	—	—	—	—	93-618	—	—	
—		32	" " "	〃									
		33	" " "										
		34	" " "										
Z	0	35	" " Cap—Right	6	932A5430	—	—	—	—	93-641	—	—	
		36	" " " "	〃									
		37	" " " "										
		38	" " " "										
—	0	39	" Pedestal	6	933A5039		—	—	—	93-619	—	—	
—	0	40	" " Cap	6	932B5084		—		〃	93-586	〃	〃	
	0	41	" " " Shim	12	〃		FIN. SIZES 1/4" X 1 1/2" X 12 3/4			〃			
	0	42	" " " "	12			FIN. SIZES. 1/8" X 1 1/2" X 12 3/4"						
—	0	43	" " " "	24			FIN. SIZES. 1 1/16" X 1 1/2" X 12 3/4						
—		44	" " " "	—									
—	0	45	" Box—Inside	6	932A5108		—	—	—	93-620	〃	〃	
	0	46	" " Cap—Inside	6	932B5083		—	93-640	—	〃			
		47	" Inside Box Spring Center	—									
	0	48	" " Thrust Plate	6	932B5082		—	—	—	93-642	—		
	0	49	" Journal Brass	12	932A5277		—	—	—	93-109	—		
		50	" " " Wedge	—									
		51											
		52											
		53											
		54											
		55											
		56											
		57											
		58											
		59											
		60											
		61											

Journal Brass 932A5277 Au Later in front of Hub

Lift 5" Tire

36 | Hub Plate | —

PATTERN NUMBERS Brass	PATTERN NUMBERS Mal. Iron	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 93—TRUCKS & DETAILS (Cont.)								
		0 ✓	1	Truck Crosstie Bar—Top	~~2~~ 5	932 A5275		932 A5275 ✓	changed 1-26-23 - to get clearance between front Drawhead Brace + Crosstie - spread coupler height 0 done to be altered if possible. Datt.			
		0	2	" " " "	— 1	932 A5502		932 A5502				
			3	" " " " Angles	—							
			4	" " " " "	—							
		0 ✓	5	" " " —Bottom	6	932 ~~X5003~~ A5501		932 ~~X5003~~ A5501 ✓	—	—	—	—
		0 ✓	6	" " " " FILL BLOCK	12	"		1¼"X3"X~~3~~"7" ✓				
		0	7	" " " TOP Fill Block	6	932 A5275		1¼"X3 1/16"X4" ✓				
			8	" " " —Center	—							
			9	" " " "	—							
		0	10	" Diagonal Braces	6 PR	932 A5137		932 A5137 ✓	—	—	—	—
			11	" " "								
			12	" " "								
			13	" " "								
		0	14	" Equalizer	3	937 A5008		93 B5029 ✓	—	—	—	—
		0	15	" Gear Cover	~~6~~ 5	932 B5435	PLATE ALL R.H. FOR PINIONS.	—				
		0 ✓	16	" " " BRACKET	6	932 ~~F~~ 5351	"	—				
		0	17	" " " "	6	932 F5263	—	5/8"X2"X21¼" ✓	—	—	—	—
			18	" " "	—							
		0	19	" " " Bracket GUIDE	6	932 A5260	PLATE	—	—	—	—	—
			20	" " " "	~~2~~ 5	932 ~~C~~ 5435	PLATE FRONT OF CENTER TRUCK PINION SIDE.					
			21	" " " "								
—	—		22	" " " "	—							
			23	"	—							
		0	24	" King Bolt	3	10153 SETS		10153 SETS ✓	—	—	—	—
		0	25	" " " Key	3	" " 4		10153 " 4 ✓	—	—	—	—
		0	26	" Safety Chain—To Frame LEFT ENG.	2	937 A5808		101-F-53 ✓	—	—	—	—
—	—	0	27	" " " " " RIGHT ENG	2	"		101-F-50 ✓				
		0	28	" " " " " TENDER.	2	"		101-F-181 ✓				
—	—		29									
			30									
—	—	0	31	TRUCK BOX—Right	6	933 A5038	—	—	—	93-618	—	—
—	—		32	" " "								
			33	" " "								
			34	" " "								
163		0	35	" " Cap—Right	6	932 A5430	—	—	—	93-641	—	—
			36	Hub Plate	—							

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construction Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 94—VALVES—DISTRIBUTION								
	1	Piston Valve								
	2	" " Follower								
	3	" " T-Ring								
	4	" " Snap Ring								
0	5	Slide Valve	3	942E 5017		—	—	—	BRONZE 94-53	—
0	6	" " Plate	3	"		—	—	—	94-54	—
	7	" " Packing Strip								
	8	" " " "								
0	9	" " Ring—Mat'l For	3	653N 5001	Pot Pattern		65-103			
0	10	" " Spring	3	#3 762A 5009						
0	11	VALVE STEM UNIVERSAL JOINT	1	7151 LINE 3	BAR STOCK	71-F-11				
0	12	" " " " JAW " KNUCKLE	1	"	" "	—				
	13	VALVE STEM								
0	14	" " Crosshead	3	942 A 5081	CUT-OUT WEB IN GUIDE TO CLEAR CROSSHEAD PIN GREASE CUP		—	94-241		
0	15	" " " Guide	3	942 A 5033			94-11			
0	16	" " " " Plate	6	"			94-10			
	17	" " " Gibs	—							
	18									
0	19	VALVE YOKE	3	942 A 5082		942 A 5082	—	—	—	—
	20	" " Block								
	21	" " Key								
0	22	VALVE STEM PACKING	3 SET	GARLOCK METALLIC STYLE #806 - OUTSIDE CASE TO CO 7704 LINE 1						
	23	Packing Rings								
	24	" Spring Washer								
	25	" Swab Cup								
	26	" Vibrating Cup								
	27	" Follower								
	28	" Stuffing Box								
	29	" " " Gland								
	30	" Spring								
	31	" Studs, Valve Stem								
	32									
	33	GROUP 95—WHEELS AND TIRES								
0	34	Wheel 5 7/8" WHEEL FIT.	12	953E 5034		—	95-304-C	—	—	—
0	35	Tire 6"	12	952 A 5039	SEC #156	—	—	—	—	—
	36	Hub Plate	—							

CLASSI

C

Group No.	TITLE
10	Ash Pan and Oil Pan
11	Axles
12	Bell and Ringer Blow-off Cock—See 26 Blower Pipe Elbow—See 63
13	Boilers
14	Boiler Details and Attachments– Boiler Checks—See 55
15	Bolts and Nuts, Studs, Pins and Boxes, Shay Engines—See 93
18	Brackets, Air and Steam Gau Cylinder, Steam and Cylinder
20	Brake Equipment, Foundation, ment, Engine and Tender Brick Arch—See 45
21	Bumpers and Details By-pass Valve—See 34
22	Cabs
23	Cab Details, Apron, Brackets, D tilator, etc. Cab Handle—See 53 Cab Lamp—See 54 Cab Tool Box—See 23 Cab Turret—See 78 Chafing Plate—See 48 Cinder Valve and Pipe—See 75 Clearances—See 98 Coal Pusher—See 88
26	Cocks and Valves, Cylinder a Globe Valves
27	Cocks and Valves, Gauge, Water
28	Cock Rigging Connecting Rods—See 72 Coupler, Engine—See 37 Coupler, Tender—See 37
29	Crank Pins and Details
30	Crossheads, Arm, Pin, Key and Crossties—See 48
31	Cylinders and Barrel Bushings
32	Cylinder and Steam Chest He Steam Chests and Bushings
34	Cylinder By-pass, Relief, Vacu Valves
35	Die Work—Flanging Dies
36	Dome—Cap, Casing and Ring

	23	Packing Rings	SET	GARLOCK METALLIC STYLE #806 - OUTSIDE CASE TO CD 7704 LINE 1								
	24	" Spring Washer										
	25	" Swab Cup										
	26	" Vibrating Cup										
	27	" Follower										
	28	" Stuffing Box										
	29	" " " Gland										
	30	" Spring										
	31	" Studs, Valve Stem										
	32											
	33	GROUP 95—WHEELS AND TIRES										
0	34	Wheel 5 7/8" WHEEL FIT.	12	953E 5034		—	95-304-C	—	—	—	—	
0	35	Tire 6"	12	952A5039	SEC #156	—	—	—	—	—	—	
	36	Hub Plate	—									
	37											
	38											
	39	GROUP 96—WHISTLE AND RIGGING										
0	40	WHISTLE	1	5" C.I. CHIME	PURCHASED	—	—	—	—	—	—	
	41	" Bowl										
	42	" Bell										
	43	" Valve										
	44	" Gland										
	45	" Nut										
	46	" Diaphragm										
0	47	" Lever	1	962A 5010		962A 5010	—	—	—	—	—	
	48	" Elbow	—									
	49	" Rigging	—									
0	50	WHISTLE Hand Lever	1	A-11149		111-F-10	—	—	—	—	—	
	51	" " " Fulcrum	—									
	52	" Rod	—									
0	53	" Bell Crank	1	A-11149		111-F-11	—	—	—	—	—	
	54	" Rod Thimble	—									
	55	" " " Washer	—									
	56											
	57	GROUP 99—MISCELLANEOUS										
	58	SPEED RECORDER RIGGING										
	59											
	60											
	61											

Chasing
Cinder
Clean
Coal
26 Cock
Glass
27 Cock
28 Cock
Conn
Coup
Coup
29 Crank
30 Cross
Cross
31 Cylind
32 Cylinder
Steam
34 Cylinder
Valve
35 Die Work
36 Domes
37 Draw
Front
All Dra
Drawgear
Drafe Pipe
Dry Pipe
39 Eccentric
Engine
42 Erecting
43 Erecting
44 Exhaust
Expansion
Feed Wat
45 Fire Door
Fire Box
Fire Extin
48 Frames and
49 Gauges, Tem
50 Guides, Yoke
51 Grate Arr
52 Grate Detail
Hand Hole
53 Hand Rail
54 Headlights
tric Wiring
55 Injectors, Boi
Keys—See 15